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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROGRAM DOCUMENT

FOR A PROPOSED

PIAUI GREEN GROWTH AND INCLUSION DEVELOPMENT POLICY LOAN

IN THE AMOUNT OF US\$350 MILLION

TO THE

STATE OF PIAUI, BRAZIL

WITH THE GUARANTEE OF THE

FEDERATIVE REPUBLIC OF BRAZIL

FEBRUARY 1, 2012

Sustainable Development Department
Brazil Country Management Unit
Latin America and the Caribbean Region

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BRAZIL – GOVERNMENTAL FISCAL YEAR

January 1 – December 31

CURRENCY EQUIVALENTS

(Exchange Rate Effective as of December 19, 2011)

Currency Unit

Brazilian Real (BRL)

R\$1.00 = US\$0.538
US\$1.00 = R\$1.860

ABBREVIATIONS AND ACRONYMS

AAAs	Analytic and Advisory Activities
ADAPI	<i>Agência de Defesa Agropecuária do Piauí</i> (State Agricultural Protection Agency)
ANA	<i>Agência Nacional de Águas</i> (National Water Agency)
APAs	<i>Áreas de Proteção Ambiental</i> (Environmental Protection Areas)
APL	Adaptable Program Lending
APP	<i>Áreas de Preservação Permanente</i> (Permanent Preservation Areas)
BNDES	<i>Banco Nacional de Desenvolvimento Econômico e Social</i> (National Bank for Social and Economic Development)
BRL	<i>Brazilian Real</i>
CADAM	<i>Comissão de Avaliação de Desempenho Ambiental</i> (Committee for Environmental Performance Evaluation)
CAR	<i>Cadastro Ambiental Rural</i> (Rural Environmental Cadastre)
CAS	Country Assistance Strategy
CEDS	<i>Conselho Estadual de Desenvolvimento Sustentável</i> (State Council for Sustainable Development)
CEEPI	<i>Conselho Estadual de Educação</i> (State Education Council)
CEPRO	<i>Fundação Centro de Pesquisas Econômicas e Sociais do Piauí</i> (Foundation for Social and Economic Research Center in Piauí)
CGE	<i>Controladoria Geral do Estado</i> (State General Auditing Agency)
CNI	<i>Confederação Nacional da Indústria</i> (National Industry Confederation)
CNR	Current Net Revenue
CODEVASF	<i>Companhia de Desenvolvimento dos Vales do São Francisco e do Parnaíba</i> (São Francisco and Parnaíba Valleys Development Company)
CONSEMA	<i>Conselho Estadual do Meio Ambiente</i> (State Environmental Council)
CPS	Country Partnership Strategy
CTD	<i>Conselhos Territoriais de Desenvolvimento Sustentável</i> (Territorial Councils for Sustainable Development)
DPL	Development Policy Loan
ECD	Early Childhood Development
EDIS	<i>Espaços de Desenvolvimento Infantil</i> (Child Development Centers)

EEZ	Ecological Economic Zoning
EJA	<i>Educação para Jovens e Adultos</i> (Education Policy for Youth and Adults)
EMATER	<i>Empresa de Assistência Técnica e Extensão Rural</i> (Technical Assistance and Rural Extension Agency)
ESW	Economic Sector Work
FDI	Foreign Direct Investment
FGV	<i>Fundação Getúlio Vargas</i> (Getúlio Vargas Foundation)
FMD	Foot and Mouth Disease
FPE	<i>Fundo de Participação dos Estados e do Distrito Federal</i> (State Participation Fund)
GDP	Gross Domestic Product
GoB	Government of Brazil
GoP	Government of Piauí
IBAMA	<i>Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis</i> (Brazilian Institute for the Environment and Renewable Natural Resources)
IBGE	<i>Instituto Brasileiro de Geografia e Estatística</i> (Brazilian Institute of Geography and Statistics)
IBRD	International Bank for Reconstruction and Development
ICMS	<i>Imposto sobre Circulação de Mercadorias e Serviços</i> (Brazilian State Value-Added Tax)
ICR	Implementation Completion and Results Report
IDEB	<i>Índice de Desenvolvimento da Educação Básica</i> (Basic Education Development Index)
IETS	<i>Instituto de Estudos do Trabalho e Sociedade</i> (Institute for Studies on Labor and Society)
IICA	Inter-American Institute for Cooperation on Agriculture
IMF	International Monetary Fund
INCRA	<i>Instituto Nacional de Colonização e Reforma Agrária</i> (National Institute for Colonization and Agrarian Reform)
INEP	<i>Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira</i> (National Institute for Educational Studies and Research Anísio Teixeira)
INTERPI	<i>Instituto das Terras do Piauí</i> (Piauí State Land Institute)
IOF	Tax on Financial Transactions
IPCA	<i>Índice Nacional de Preços ao Consumidor Amplo</i> (Consumer Price Inflation)
IPEA	<i>Instituto de Pesquisa Econômica Aplicada</i> (Institute for Applied Economic Research)
JMAP	Joint Management Action Plan
LDO	<i>Lei de Diretrizes Orçamentárias</i> (Budget Guidelines Law)
LIBOR	London Interbank Offered Rate
LOA	<i>Lei Orçamentária Anual</i> (Annual Budget Law)
LRF	<i>Lei de Responsabilidade Fiscal</i> (Fiscal Responsibility Law)
MAPA	<i>Ministério da Agricultura, Pecuária e Abastecimento</i> (Ministry of Agriculture, Livestock, and Supply)

MEC	<i>Ministério da Educação</i> (Ministry of Education)
M&E	Monitoring and Evaluation
MMA	<i>Ministério do Meio Ambiente</i> (Ministry of Environment)
NE	Northeast
NPL	Non-Performing Loan
OIE	World Organization for Animal Health
PAC	<i>Programa de Aceleração do Crescimento</i> (Federal Program for Accelerating Growth)
PAF	<i>Programa de Ajuste Fiscal</i> (Fiscal Adjustment Program)
PAPP	<i>Programa de Apoio ao Pequeno Produtor Rural</i> (Support Program for Small Rural Producers)
PAR	Education Coordinating Action Plan
PCPR	<i>Programa de Combate à Pobreza Rural</i> (Rural Poverty Reduction Program)
PDE	<i>Plano de Desenvolvimento da Educação</i> (Educational Development Plan)
PFM	Public Financial Management
PNAGE	<i>Programa de Apoio à Modernização da Gestão e do Planejamento do Estado do Piauí</i> (Program for the Modernization for Planning and Administration)
PNQA	<i>Programa Nacional de Avaliação da Qualidade das Águas</i> (National Quality Water Evaluation Program)
POLONORDESTE	<i>Programa de Desenvolvimento de Áreas Integradas do Nordeste</i> (Program for Integrated Rural Development of the Northeast)
PPA	<i>Plano Plurianual</i> (Multi-Year Plan)
PRAD	<i>Plano de Recuperação de Área Degradada</i> (Plan for Rehabilitation of Degraded Areas)
PROGERE	<i>Programa Estadual de Geração de Emprego e Renda no Meio Rural</i> (Piauí State Program for the Elimination of Rural Poverty)
PRONAF	<i>Programa Nacional para o Fortalecimento da Agricultura Familiar</i> (Program for the Strengthening of Family Farming)
PSIA	Poverty and Social Impact Assessment
RBM	Results-Based Management
RER	Rural Environmental Cadastre
RNR	<i>Receita Líquida Real</i> (Real Net Revenues)
RPPN	<i>Reserva Particular do Patrimônio Natural</i> (National Forest and Natural Reserves)
RPRP	Rural Poverty Reduction Program
SDR	<i>Secretaria do Desenvolvimento Rural do Estado do Piauí</i> (Secretariat for Rural Development)
SEDUC	<i>Secretaria de Educação do Estado do Piauí</i> (Secretariat for Education)
SEFAZ	<i>Secretaria da Fazenda do Estado do Piauí</i> (Secretariat of Finance)
SEMAR	<i>Secretaria do Meio Ambiente e Recursos Hídricos do Estado do Piauí</i> (State Secretariat for Environment and Water Resources)
SEPLAN	<i>Secretaria do Planejamento do Estado do Piauí</i> (State Secretariat of Planning)

SIAFEM	<i>Sistema Integrado de Administração Financeira</i> (Integrated Financial Administration System)
SIL	Specific Investment Loan
STN	<i>Secretaria do Tesouro Nacional</i> (National Treasury Secretariat)
SWAp	Sector-Wide Approach
TAL	Technical Assistance Loan
TCA	<i>Termo de Compromisso e Adesão</i> (Term of Commitment and Adherence)
TCE	<i>Tribunal de Contas do Estado do Piauí</i> (State Audit Court)
UK	United Kingdom
USA	United States of America
USD	American Dollar
ZEE	<i>Zoneamento Econômico Ecológico</i> (Ecological-Economic Zoning)
WB	World Bank

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BRAZIL
Piauí Green Growth And Inclusion Development Policy Loan

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LOAN AND PROGRAM SUMMARY

BRAZIL

PIAUI GREEN GROWTH AND INCLUSION DEVELOPMENT POLICY LOAN

Borrower	State of Piauí, Brazil
Implementing Agency	Piauí State Secretariat of Planning
Financing Data	US\$350 million
Operation Type	Single-tranche DPL of US\$350 million
Main Policy Areas	This operation supports state policies and programs that: (i) promote green, inclusive growth in rural areas through the improvement of land tenure security, sustainable agriculture, and environmental sustainability; (ii) promote inclusive growth through the enhancement of access to basic education, increased learning outcomes of public schools, and strengthened participation of vulnerable youth in public policies and programs; and (iii) promote fiscal sustainability through increased efficiency in public expenditure management.
Key Outcomes Indicators	<p>Promote Green Growth in Rural Areas: (i) 100% increase in the number of applications for rural land tenure regularization submitted to INTERPI; (ii) 15% increase in the number of eligible Common PRONAF credit applications received; (iii) PROGERE operating in 112 municipalities; (iv) 130,000 ha of land in the CAR in the Cerrado region.</p> <p>Improve Access to and Quality of Education: (i) 20% increase in the number of enrollments in secondary education through the use of the Piauí Digital Program and other technologies; (ii) Decrease, by at least 1% annually, from 38.1 in 2010 to 36, in the percentage of children more than two years behind grade level in grades 1 to 4 in state public schools; (iii) Selection of all regional managers through the new selection process, and at least 80% of school principals selected according to procedures in Decree 14,607; (iv) 50% increase in number of Municipal Youth Councils created by legal documentation from 8 Municipal Councils in 2010.</p> <p>Increase the State's Public Management Efficiency: 60% of state projects or programs included in the results-based management system.</p>
Program Development Objective(s) and Contribution to CPS	The Program Development Objective is to support the Government of Piauí (GoP) in the implementation of its efforts to achieve higher rates of inclusive green growth. In particular, it supports the government's strategy to develop policy reforms and programs that: (i) promote statewide rural green inclusive growth by: (a) improving land tenure security, (b) promoting sustainable agricultural practices, and (c) ensuring environmental sustainability; (ii) promote inclusive growth through improved statewide public education and a strengthened role for youth in the labor market; and, (iii) promote fiscal sustainability through a strengthened institutional framework for efficient public service delivery through the creation and implementation of a results-based management system within the public sector.

	<p>The proposed operation is fully consistent with the objectives of the Brazil CPS for 2012–2015 (Report No. 63731 BR) discussed by the Executive Directors on November 1, 2011, especially the objective of developing new partnerships at a subnational level, focusing on the country’s pending environmental and poverty reduction challenges. The policy framework supported under the DPL aims to contribute to the State of Piauí’s efforts to address the challenges of expanding sustainable agriculture while improving environmental and land tenure management; improving the coverage and quality of education for the poor; and increasing the efficiency of fiscal and public sector management. As specified in the CPS, the level of Bank lending must be consistent with the credit ceilings specified in each state’s Fiscal Adjustment Program (PAF) and must be approved by the National Treasury Secretariat (STN).</p>
<p>Risks and Risk Mitigation</p>	<p>Brazil’s Economic risks: These are associated with the impact of the Euro zone crisis on Brazil’s economy at the country level. Brazil’s fiscal framework provides the government with the flexibility to successfully respond to the global financial crisis with an array of fiscal, monetary, and external measures to stimulate domestic demand. Gross Public sector debt is expected to decline in the future, from 63.1 percent of GDP projected for 2011 to around 58.1 percent of GDP in 2013, despite difficulties in maintaining fiscal balance in the face of large investment needs and pressures from current expenditure growth. Moreover, flexible exchange rates and relatively large foreign reserves should help Brazil address the consequences of a potential external crisis, including a possible abrupt shift in market perceptions and an associated turn-around in capital flows. The banking sector remains highly liquid and capitalized, and Brazil’s large international reserves – in excess of \$350 billion – provide ample buffers to react to such events.</p> <p>Piauí’s Fiscal Risks: The projected fiscal and debt paths for the state of Piauí are deemed sustainable in the medium-term. The state is in full compliance with the Fiscal Responsibility Law and the risk associated with the Fiscal Adjustment Program is low. A possible impact on the State’s Participation Fund (FPE) revenue owing to the impact of the Euro zone crisis on Brazil’s economy could be absorbed by a more modest increase in investment.</p> <p>Social impact: the specific policy reforms supported by this development policy loan are expected to have significant and positive poverty alleviation and social development impacts in the State of Piauí because they address key constraints to human development, economic growth and public governance and transparency. The land regularization policy and the associated Law (No 6,127/ 2011) establishes realistic application requirements on family farmers while also creating a route through which they (unlike large farmers) could obtain the land free of charge through grants. Also, the same Law deems ineligible for regularization <i>quilombola</i> lands and areas occupied by traditional populations as a means of protecting these lands of vulnerable groups from being co-opted by large-</p>

	<p>scale agriculture. Instead, the unique challenges of land tenure regularization for <i>quilombola</i> lands were adequately addressed by the Decree No.14,625. The combination of productive inclusion through the environmental registry of rural properties and secure land tenure rights policies will likely contribute to reduce poverty insofar as the access to credit and financing lines as well as to technical assistance by small and medium landholders will increase. In addition, by addressing the key challenges of improving school management and decreasing illiteracy, repetition and dropout rates, the policies supported by this operation are expected to overcome the main constraints confronted by the weak state educational system.</p> <p>Environmental aspects: Overall, the specific policy reforms supported by this development policy loan are expected to have significant and positive environmental effect because they promote environmental compliance in rural areas and sustainable agriculture. These are of great relevance to environmental quality and natural resources protection in the state because agriculture is expanding rapidly, especially in the southern section covered by the Cerrado. Law No. 6,127 of November 28 2011, which focuses on land already occupied, directly links land tenure regularization to the requirements for farmers to be registered in the Rural Environment Cadastre (CAR) and to rehabilitate the area deforested illegally. Law No. 6,127 also establishes an initial screening process, and any land that is deemed by the State Environmental Secretariat (SEMAR) to be of ecological interest will be considered ineligible for regularization. In addition, the State CAR law 6,132 /2011 has a separate broader positive environmental impact as it applies to all private holdings (i.e. those already regularized) ensuring environmental compliance and requiring the rehabilitation and protection of areas deforested illegally.</p>
Operation ID	P126449

**INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT
PROGRAM DOCUMENT FOR A PROPOSED
PIAUI GREEN GROWTH¹ AND INCLUSION DEVELOPMENT POLICY LOAN TO
THE STATE OF PIAUI**

I. Introduction

1. **This document presents a proposed single-tranche stand-alone Development Policy Loan (DPL) of US\$350 million to the State Government of Piauí (GoP) in Brazil.** The operation would support the GoP's vision of promoting the state's development through the expansion of sustainable agriculture with social inclusion. It is also in line with the request by the Federal Government to assist the multi-sector "*Brasil sem Miséria*" Program which has strong focus in the Northeast states, including Piauí. The Program intends to expand the coverage of its main social programs to better reach the most vulnerable populations and step-up efforts to improve the income generation capacity of the poor.

2. **More specifically, this operation would support state policies and programs that: (i) promote green growth in rural areas, (ii) improve access and quality of education, and (iii) strengthen the institutional framework for efficient public service delivery through the creation and implementation of a results-based management tool within the public sector.** This operation also pays special attention to the targeting of such policies and programs to support and promote women, youth and *quilombolas* groups. This proposed DPL is the first operation of a broader Bank and GoP partnership which will be followed by a Sector-Wide Approach (SWAp) investment operation that would focus mainly on the implementation of the policy reforms and programs considered in this DPL, enhancing the Bank's longer-term engagement with the GoP to promote development with social inclusion in Piauí.

3. **The proposed DPL is the second operation between the Bank and the State of Piauí.** In 2001, the Bank approved a Specific Investment Loan (SIL) operation with the state, the Rural Poverty Reduction Project (P050881), to help the state reduce rural poverty levels by improving the well-being and income of the rural poor. These objectives were promoted by improving access to basic social and economic infrastructure and services and support for productive activities, increasing the social capital of rural communities to organize collectively to meet their own needs, and enhancing local governance through greater citizen participation and transparency in decision making. More recently, the Bank initiated an APL operation with the municipality of Teresina, the state capital. The Teresina Enhancing Municipal Governance and Quality of Life Project (P088966, approved in 2008) supports improvements to the Teresina Municipal Government's management capacity in the areas of financial, urban, environmental service delivery and economic development, and aims to improve the quality of life of the low-income population of the Lagoas do Norte region.

4. **The Green Growth and Inclusion DPL will be the Bank's most significant support to date to Piauí, which faces a profound contradiction represented by the wealth of its natural resources on the one hand, and the low level of its social indicators on the other.** The state covers 25.1 million hectares and is endowed with greater natural resources than its Northeastern neighbors. The state contains more than 6 million hectares of well-drained flat land viable for

¹ "Green growth" is defined as resource efficient, low-carbon, and socially-inclusive growth. For the purpose of this DPL it focused only on rural areas.

high-value agriculture. In contrast to the rest of the Northeast (with the exception of Maranhão, which has certain characteristics similar to those of Piauí), most of the state receives adequate rainfall for rainfed agriculture. Piauí also possesses more than half of all the groundwater resources of the Brazilian Northeast. The southeastern portion of the state contains significant mineral resources, notably deposits of lime and phosphate which are important for agriculture. The agricultural sector accounted for 10.9 percent of the state's economy in 2008. A major contributor to the sector's growth was the excellent performance of the cultivation of soybeans and other grains in the Cerrado region, which have achieved high productivity levels and incorporated new areas of cultivation as part of process of productive occupation of the region known as MAPITOBA (parts of the states of Maranhão, Piauí, Tocantins and Bahia).

5. **The state's illiteracy rate is the second-worst state rate (23.4 percent) nationwide,** lower only than that of Alagoas (24.6 percent), although the situation has been improving over the past 10 years. Piauí also has the lowest state GDP with R\$ 5,372², far lower than the average National GDP of R\$15,989. Thus, proactive local development strategies and policies are urgently needed to ensure that the envisioned growth for Piauí will lead to the emergence of a competitive and sustainable formation of human capital, agricultural expansion, natural resources conservation, and equitable access to opportunities and public services. Improvements in the education system are a prerequisite for sustained agricultural production, environment preservation, poverty reduction, and economic development in the state.

6. **This proposed DPL operation also addresses gender inequalities within the context of the policies it supports.** The land regularization policy supported by this operation should contribute to reduce gender inequalities which, in rural areas, are world widely related to the neglect of women's land rights. This will be achieved by stipulating that the land titles must be issued in the name of both spouses. In addition, the newly created "State Program for the Elimination of Rural Poverty" (PROGERE), supported by this operation, aims at generating employment and income in family farming and has specific provisions for improving the active involvement and participation of women in economically and environmentally sustainable rural production chains.

7. **The proposed DPL operation and associated Bank support meet the criteria for engagement with subnational governments as agreed under the World Bank Group's Country Partnership Strategy (CPS) 2012–2015** (Report No 63731-BR), discussed by the Executive Directors on November 1, 2011. As specified in the CPS, the level of Bank lending must be consistent with the credit ceilings specified in each state's Program of Fiscal Adjustment (PAF) and must be approved by the National Treasury Secretariat (STN).

II. Country and State Context

A. *Recent Economic Development in Brazil*

8. **Brazil's relative resilience to the global financial crisis reflected good macroeconomic management and a solid financial system.** Following the global crisis in September 2008, Brazil suffered a sudden reduction in external and domestic credit, and a marked currency depreciation. Rapidly falling external demand and a sharp decline in investment led to a 4.2 percent contraction in gross domestic product (GDP) in the fourth quarter of 2008 followed by a

² 2008 data, from IBGE 2010

2 percent decline in the first quarter of 2009. The recession, however, lasted only those two quarters. Prompt response by the authorities avoided a credit crunch, and mitigated the impact of the global financial crisis on the Brazilian economy, which recovered rapidly. Fiscal policy was appropriately countercyclical in 2009 and remained expansionary in 2010, driven by strong rigidities in current expenditures, the political cycle, and difficulties in quickly reversing the countercyclical measures enacted in the previous year. After experiencing almost zero growth in 2009, the economy grew at a 7.5 percent annual rate in 2010. Detailed analysis of the country and state context, including data on key macroeconomic indicators and projections for 2005-2015 are presented in Annex IV.

9. **At least until mid 2011, large portfolio inflows exerted a strong upward pressure on the real and were accompanied by growing private sector indebtedness.** The currency, which had already appreciated by 11.9 percent in 2010, traded at a high of R\$1.59 per US dollar at the end of August 2011, a 44 percent appreciation since the start of 2009. The Central Bank rapidly accumulated international reserves, reaching US\$350 billion in November 2011 (up from US\$238.5 billion in December 2009). This was accompanied, however, by an increase of about 50 percent in Brazil's external debt, from US\$198 billion in 2009 to US\$301.5 billion in end-November 2011, of which 15 percent had a maturity of up to 360 days. Broadly defined gross external debt, however, including intercompany loans and nonresident holdings of domestic fixed income instruments, has also increased significantly, from US\$373.4 billion to US\$537.3 billion between 2009 and November 2011. Private sector gross external indebtedness, in particular, rose 65 percent over this period, reaching US\$344.5 billion. The biggest increase occurred among banks, whose gross external debt reached \$140.7 billion, a 121 percent increase with respect to December 2009.

10. **To address risks of overheating, in 2010 the Central Bank adopted a contractionary monetary policy stance, complemented with a tighter fiscal policy in 2011.** Consumer price inflation (IPCA), as measured by the Brazilian Institute of Geography and Statistics (IBGE) closed 2010 at 5.91 percent. To control inflation, the Central Bank increased the policy rate by 375 basis points, starting in April 2010, to 12.5 percent in June 2011. Furthermore, in February, 2011, the Government announced cuts in budgeted expenditures of R\$50 billion, which, coupled with strong revenue performance enabled it to generate a larger primary surplus of approximately 2.91 percent of GDP by November 2011, compared to 2.4 percent in 2010 (see Table 1 for Key Macroeconomic Indicators).

11. **While inflation has continued accelerating during most of 2011, starting in August of this year the Central Bank has eased its policy stance in response to the worsening global economic outlook.** During most of 2011, labor market conditions tightened, with record levels of job creation and historically low unemployment (5.2 percent in November 2011). Inflation reached 6.5 percent in 2011, in line with the upper limit of the inflation target. However, since August 31, 2011, in response to a perceived deterioration in the outlook for global growth and the expectation that it will have a disinflationary impact in Brazil; the Central Bank has reduced its policy rate by 200 basis points to 10.5 percent. Moreover, in November, 2011, the Central Bank significantly reduced capital requirements for consumer loans, in some cases by 50 percent. On the fiscal policy front, however, the Government intends to maintain its current contractionary policy stance. In particular, it has announced a commitment to primary surplus targets of 3.1 percent of GDP in both 2012 and 2013.

12. Economic activity has decelerated significantly during the second half of 2011 reflecting both domestic and external factors. On one hand, the deceleration has been driven by the tighter monetary and fiscal policy stances adopted by the Government during the first half of the year. On the other hand, the fiscal crisis in the Euro zone has led to a worsening of the global economic outlook coupled to a reduction in business and consumer confidence. In this context, GDP exhibited zero growth during the third quarter of 2011, a sharp deceleration with respect to the 0.8 percent growth observed, on average, during the previous four quarters. On the supply side, the largest deceleration was observed in industry and services, which contracted by respectively 0.9 and 0.3 percent in the third quarter, compared to average quarterly growth of respectively 0.5 and 0.9 percent over the previous year. Among these, the industrial sector was arguably already being hardly hit by global economic developments, as reflected in the appreciation of the real and the deceleration of external demand for Brazilian manufactured products. On the demand side, the deceleration observed during the third quarter was driven by the contraction of domestic demand, especially government consumption (-0.7 percent), followed by gross capital formation and household consumption (respectively -0.2 and -0.1 percent). More recent data suggest that economic activity continued to be weak in the fourth quarter, albeit with some signs of moderate recovery starting in November. While in October industrial production and broadly defined retail sales (including vehicles and construction material) contracted by respectively 0.6 and 0.4 percent month-on-month (strictly defined retail sales were flat in that month), they expanded by respectively 0.3 and 1.5 percent in November (1.3 percent for narrow retail sales). Similarly, the Central Bank's IBC-Br index, a proxy for monthly GDP, exhibited a -0.32 percent contraction in October but expanded by 1.15 percent in November.

13. The banking system appears well prepared to absorb a possible worsening of the credit portfolio. Early stage delinquency indicators (loans that are between 15 and 90 days overdue) have been rising gradually over the last year, mainly in the consumer segment (6.9 percent in October 2011 up from 5.3 percent in December 2010). The system-wide solvency ratio currently stands at around 17 percent, as supervisors have been phasing in tightened capital requirements in anticipation of Basel III while Banks have obtained robust profits which they have been able to capitalize. Similarly, while housing loans have grown very strongly (47 percent in the year to October 2011, accounting for 44 percent of growth in Bank loans to individuals), there is a low risk of an "asset bubble" developing in Brazil's real estate markets. Indeed, those loans still represent only 10 percent of total private sector credit and their delinquency rates have fallen significantly thanks to the improvement of the mortgage foreclosure system (e.g. loans overdue for more than 90 days were 5.9 percent in July 2011, down from 23.9 percent in 2006).

14. The current account has remained stable during 2011 while FDI has exhibited solid growth even as the global economic outlook has deteriorated. The current account deficit totaled \$47.3 billion in the twelve months to October 2011. FDI, however, totaled \$75.1 billion in the twelve months to October 2011, compared to \$36 billion in the year to October 2010. Going forward, the current account deficit is expected to increase slightly in 2012, driven by lower growth in export prices and a reduction in the trade surplus. While FDI may experience a moderate reduction in 2012, due to the unfavorable external scenario and a deceleration in domestic demand, it is expected to remain strong over the medium term and help finance the majority of the current account deficit.

15. **The prospect for growth in foreign portfolio investments is less positive.** Driven mainly by high real domestic interest rates at a time of exceptionally low interest rates internationally, these inflows have put strong upward pressure on the real and prompted the authorities to increase taxes on financial transactions (IOF) of foreign fixed income investments from 2 to 6 percent in October 2010. This measure, together with recent increases in global risk aversion associated with the fiscal crisis in Europe, has already caused a slow-down in portfolio flows – e.g. from \$66.3 billion in the twelve months to October 2010 to \$23.3 billion in the year to October 2011. Going forward, these inflows could be negatively affected by the increased international turmoil. Moreover, while real interest differentials are likely to remain large, the recent Central Bank decisions to reduce the policy rate will diminish the stimulus for carry-trade operations.

16. **Going forward, a further build-up of reserves can be expected in 2012.** Persistently higher domestic interest rates are expected to prompt the private sector to continue increasing its external indebtedness. In this context, the Central Bank has stepped up its monitoring of prudential and macro-prudential risks associated with potential currency mismatches by financial and non-financial companies, by increasing reporting requirements on foreign borrowing by non-financial corporations. It has also taken measures to mitigate those risks by tightening regulations on banks' net open positions and, at least until very recently, by also tightening capital requirements to curtail credit growth.

B. Current Macroeconomic Outlook and Debt Sustainability in Brazil

17. **While GDP growth is expected to be slightly above 3 percent in 2011 and to remain below 3.5 percent in 2012,** the medium-term macroeconomic outlook points to an annual GDP growth rate of between 4 and 4.5 percent. In the short term, the forecast is for lower growth compared to previous periods, as the Brazilian economy suffers the consequences of the deterioration in the global economic outlook. Besides the lower growth forecast, negative developments in the rest of the world may have an impact on Brazil's external and fiscal accounts in the short term. In the medium term, growth is likely to be driven by strong domestic aggregate demand. Investment growth, in particular, will be spurred by the development of new offshore oil fields and preparation for upcoming mega sporting events.

18. **In the short term, the external sector is one of the main sources of Brazil's vulnerability to a global slowdown through possible impacts on trade volumes, commodity prices and exchange rate movements.** A worsening of the global economy caused by a full-blown euro zone debt crisis and/or a US recession, may translate into lower external demand for Brazil's exports, while a Chinese hard landing would hit Brazil's terms of trade, and demand for exports, given the significant demand from China. The current account deficit is expected to increase slightly in 2012, driven by a decline in the trade surplus, owing mainly to lower growth in export prices. As the current-account deficit widens, the Real could weaken slightly in nominal terms against the US dollar, as was observed during the third quarter of 2011. Nonetheless, Brazil's vulnerability to external events will remain low due to its high reserves and favorable debt composition.

19. **Secondly, the banking sector is vulnerable to continued global slowdown given the exposure of some small and medium sized banks to liquidity risk.** Small and medium sized banks, currently holding 8 percent and 12 percent of the Banking system's assets still largely rely

on more volatile sources of funding. However, system-wide assessment of banks indicates that Brazil's banking system currently has solid liquidity levels and capital cushions.

20. Further worsening of the global economic environment also poses risk to the fulfillment of fiscal targets. The achievement of primary surplus targets may be affected by the deceleration of economic activity, as federal revenues could decline and social protection expenditures are likely to increase. Moreover, despite the Government's current commitment to using mainly monetary policy levers to counter the ongoing economic deceleration, recent policy measures suggests that it remains open to adopting complementary fiscal and quasi fiscal stimuli if economic activity were to decelerate more sharply.

21. In the medium term, Brazil also faces structural challenges that limit its long-term growth potential. A short list of challenges includes developing a private market for long-term financing and improving the business environment (in particular, reducing the costs associated with complying with tax obligations and obtaining business permits and licenses). Other important issues are the need to increase public and private investment, so as to address growing infrastructure bottlenecks and achieve faster productivity growth, and that of improving the effectiveness and cost-effectiveness of public expenditures.

22. Despite the above external risks and domestic challenges, the Government's overall macroeconomic framework is deemed sustainable in the medium term and adequate for the purposes of a DPL. Brazil's fiscal framework (See Annex IV, Box 1 for more details on Brazilian Fiscal Federalism) has provided the Government with the flexibility to successfully respond to the 2008/09 global financial crisis with an array of fiscal, monetary, and external measures to stimulate domestic demand. Gross public sector debt is expected to decline in the future, from 63.1 percent of GDP projected for 2011 to around 58.1 percent of GDP in 2013, despite difficulties in maintaining fiscal balance in the face of large investment needs and pressures from current expenditure growth. Moreover, flexible exchange rates, relatively large foreign reserves and a well capitalized banking system should help Brazil address the consequences of a potential external crisis, including a possible abrupt shift in market perceptions and an associated turn-around in capital flows.

C. Recent Socioeconomic Development and Fiscal Sustainability in Piauí

23. Piauí represents a 1.6 percent share of national population with 3,118,360 inhabitants. At 25.1 million hectares, Piauí is slightly larger than the UK or about the size of the USA state of Oregon, and its population density is the lowest of Brazil's northeastern states (about 12.4 inhabitants per km²).

24. Piauí poverty headcount and inequality are still high when compared to the national average, however, the indicators are reducing at satisfactory rates mainly due to the *Bolsa Família* program (a World Bank supported conditional cash transfer program implemented by the Federal Government in Brazil). In 2009, nearly 50 percent of Piauí's population participated in the *Bolsa Família* program. The Gini coefficient has declined from 0.57 to 0.55 between 2008 and 2009 and it was ranked fourth among Brazilian states for income inequality.

25. Although Piauí is among Brazil's poorest states, it is trying to change this situation, especially through the promotion of agriculture. Piauí was the Brazilian state with the highest growth in real GDP in 2008 (8.8 percent), surpassing the national average, 5.2 percent, and that of the Northeast, 5.5 percent. The good results in 2008 were due largely to agriculture, which

accounted for 7.3 percent of the state's economy compared to 4.5 percent in 2007, representing 1.1 percent of national agriculture in 2008 compared to 0.6 percent in 2007, an increase of 62.1 percent in real terms.

26. **Piauí's GDP grew 6.2 percent in 2009, reaching R\$ 19 billion.** This growth surpassed the growth rate of the Brazilian economy, which experienced a decline of 0.3 percent. This solid growth of 6.2 percent was driven mainly by industrial activities and services, which grew 12.9 percent and 5.4 percent respectively. From 2002 to 2009, the State had the 4th fastest-growing GDP rate in the country and the largest growth in the Northeast region. As a result of this good growth performance the State unemployment rate is being kept at low levels.

27. **The fiscal crisis in the Euro zone should have limited impact on the state economy since its trade with the region is small.** The State's economy should continue growing above the national level, with growth in the range of 5 percent, despite the slowdown of the country's economy. This growth will be sustained by agriculture and services. The production of grains in 2011 is expected to be 50percent higher than that observed in 2010 and the services sector will benefit from the expansion of employment and increase in the minimum wage in 2012. The crisis however can impact the fiscal transfer from the Federal Government (FPE).

Fiscal and Debt Outlook

28. **The state's fiscal situation** improved markedly during the 2003-10 period and is currently sound. An indicator of this evolution is the stock of public debt in relation to current net revenue (CNR), which dropped from 164 percent in 2003 to 56 percent in 2010. In absolute terms, the debt in 2010 was R\$2.5 billion, nearly all of it domestic.

29. **The ability to maintain the high repayment rate was obtained by running a primary surplus over the period which is projected to continue during 2012-14 period** (Table 1). The level of indebtedness is low. Spending on debt service has been, on average, about 11.5 percent of CNR.

30. **Revenues are increasing, reflecting strong economic growth.** This positive performance was maintained even during 2009, when revenues grew 8 percent. The ability to manage resilient economic growth and increase its own revenues in a time of national crisis strengthens the state's fiscal outlook.

31. **Another main source of revenue for the state is the transfers from the Federal Government to the states through the State Participation Fund** (*Fundo de Participação dos Estados e do Distrito Federal*, FPE³). Revenues from the FPE showed a strong growth of 56 percent between 2003 and 2010. The FPE's drop in 2009 is the result of the effects of the financial crisis. The slowdown on the Brazilian economy may affect the projected revenue from FPE in 2012, but not in 2011 as Piauí has already received R\$2.3 billion from FPE by November.

32. **Expenditures are below the 60 percent limit set by the Fiscal Responsibility Law (LRF) and under control.** The share of personnel expenditure in total expenditure in 2010 is the same as that observed in 2003. In this case, however, the relevant variable is the expense related to Current Net Revenue (CNR). In the 2007–2010 period, this ratio grew from 43 percent to 52

³ FPE: Fundo de Participação dos Estados

percent. Although this level of spending is below the 60 percent limit set by the Fiscal Responsibility Law (LRF), it should continue to be closely monitored.

33. The state shows a strong increase in investments. The resources invested in 2009 and 2010 are ten times higher than those invested in 2003. This has occurred in spite of the significant increase in debt repayment and was made possible by a combination of increased revenues and credit operations.

State Fiscal Situation in 2011

34. The Piauí State Government maintained firm fiscal discipline during the first half of 2011. The ICMS and FPE grew to R\$981 million (10.3 percent) and R\$1.3 billion (29.1 percent) respectively compared to the first half of 2010. Thus, total current revenue increased 11.8 percent, from R\$2.7 billion in the first half of 2010 to R\$3.0 billion in the same period of 2011.

35. Personnel expenditures increased 12.6 percent, reaching R\$1.16 billion, which is in line with the growth of current revenues in the period. The Government maintained rigorous control over the other current expenditures, with no increase from the first half of 2010 to the same period of 2011.

36. There was a sharp decrease in investment, from R\$539 million in the first half of 2010 to R\$131 million in the same period of 2011. Such decrease was expected under the first year of a new State administration which is still guided by the PPA of the previous administration. Thus, the state's total nonfinancial expenditures grew only 6 percent in the first half of 2011, reaching R\$2.4 billion, when compared to the same period of 2010.

37. The state's primary surplus grew from R\$29 million in the first half of 2010 to R\$586 million in the same period of 2011. This is due to the combination of a substantial increase of the FPE, a sharp decrease in investments, and tight control of expenditures.

38. Current revenue is expected to grow 11 percent over the next three years. This percentage is compatible with a state economy growing in the range of 5 percent, inflation around 4.5 percent and a productivity gain in tax collection of 1.5 percent. The revenue would grow from R\$4.6 billion in 2010 to R\$7.0 billion in 2014. The ICMS is expected to grow from R\$1.9 billion to \$2.9 billion and FPE from R\$2.1 billion to R\$3.6 billion in the period 2010-2014.

39. On the expenditure side the personnel expenses rise almost 17 percent in 2011 and in 2012 and 2013 are expected to rise around 8 percent. This is in line with the expected inflation and exogenous payroll growth and will not compromise the target of the Fiscal Responsibility Law. Piauí projects a strong increase in investments in 2012 and 2013, in the range of R\$1.2 billion.

40. The fiscal crisis in the Euro zone reached the national economy, which had a zero growth in the third quarter of 2011 and the expected growth of FPE in 2012 may not happen. A more realistic scenario is for the FPE growing in line with the expected growth of ICMS at about 11 percent. The possible decrease in FPE revenue in 2012 should not compromise the state fiscal balance since it should be compensated by the expected increase in ICMS and by lowering the projected increase for investments.

41. **The planned debt service is high due to the high values of amortization.** They practically double between 2010 and 2012 (Table 1), from \$359 million in 2010 to \$741 million in 2012. The interest payment remains around R\$150 million in the period.

Table 1. Fiscal projection of the Piauí State Government 2011-2013 (R\$ million)

	2010	2011	2012	2013	2014
CURRENT REVENUE	4,644.00	5,194.00	5,739.00	6,380.00	7,018.00
ICMS	1,906.00	2,128.00	2,346.00	2,611.00	2,872.00
FPE	2,108.00	2,634.00	2,929.00	3,260.00	3,586.00
Others	630	432	464	509	560
NON FINANCIAL EXPENSES	4,656.00	5,025.00	5,671.00	6,205.00	6,805.00
Personnel	2,393.00	2,798.00	3,020.00	3,259.00	3,585.00
Investments	819	757	1,110.00	1,183.00	1,280.00
Others	1,444.00	1,470.00	1,541.00	1,763.00	1,940.00
PRIMARY BALANCE	-13	169	68	175	213
INTEREST	158	117	177	156	180
AMORTIZATION	359	597	741	405	260
PUBLIC BORROWING REQUIREMENT	413	545	851	386	225
CREDIT OPERATIONS	412	542	850	386	225

42. **The risks associated with the Fiscal Responsibility Law-LRF are low.** The State fulfils its two main targets that are limits to the public debt and personnel expenses. The LRF set a maximum value for the State debt equal to 200 percent of its CNR.

43. **The personnel expenses limit is 52 percent of the CNR, below the limit of 60 percent defined by the LRF.** The State has been showing a solid control of this expense. The ratio is expected to increase to 54 percent in 2011 but it would be reverted to the 52 percent range until 2013.

44. **The risks associated with the Fiscal Adjustment Program-PAF are also low.** In 2010 the debt was 61 percent of Real Net Revenues (RNR⁴), while the PAF has a limit to indebtedness that is 100 percent of RNR.

Medium term fiscal and debt sustainability

45. **The projected fiscal and debt paths for the state of Piauí are deemed sustainable in the medium-term.** The state is in full compliance with the LRF and the risk associated with the Fiscal Adjustment Program is low. The restructuring of the debt of the State of Piauí with the

⁴ The difference between the Real Net revenue –RNR and Current Net Revenue CNR is that the first discount transfers to FUNDEB (Basic Education Fund) in addition to transfers to the municipalities.

Federal Government pushed a significant part of the debt service payments to the period 2011-2013. The expected debt amortization next year will consume more than 13 percent of RNR but will still allow for a 46 percent increase in investment. A possible impact on the FPE revenue owing to the impact of the Euro zone crisis on Brazil's economy could be absorbed by a more modest increase in investment. As principal payments exceed new disbursed loans, debt/RNR is trending down and Piauí's indebtedness capacity increasing. This DPL is expected to restore the State investment's capacity by: (i) reducing debt service payments and freeing RNR in 2011-2013, and (ii) helping finance a portion of the investment program for the next 2 years.

46. **The baseline projections indicate a sustainable path, with a significant fiscal space in 2012 and 2013 although savings in cost are relatively small** (based on conservative assumptions). The prepayment reduces the cost of carry (interest earned on idle balances are lower than rates paid on debt services).

Agriculture and Environmental Dynamics

47. **Piauí is located in the Northeast region of Brazil and it is bounded on the west by Maranhão, on the east by Ceará, Pernambuco and Bahia, and on the south by Tocantins.** It has the shortest Atlantic coastline of the northeast states. The ecoregions of Piauí are characterized by the sandy soils along the Atlantic coast, which are home to the Northeastern Brazil restingas, low evergreen forests adapted to the nutrient-poor conditions. The lower basin of the Parnaíba is home to the Maranhão Babaçu forests, which extend westward into Maranhão. The eastern portion of the state is dominated by the dry Caatingas shrublands, which extend across much of northeastern Brazil. The Cerrado savannas extend across the southwestern portion of the state, in the basins of the upper Parnaíba and Guruguéia rivers.

48. **Piauí was originally occupied by miners and cattle ranchers and is still largely an agricultural economy: 34 percent of the population lives in rural areas⁵.** Although agriculture's share in the state's economy was only about 10.9 percent in 2008 (up from 8.2 percent in 2007⁶), this figure vastly understates the economy's dependence on agricultural productivity: much of the rural economy is nonmonetary, and many activities in other sectors are essentially dependent on agriculture and the fluctuations of its output. Moreover, the state's economic growth will depend increasingly on the expansion of commercial agriculture in the state's southwestern Cerrado region, considered one of Brazil's last agricultural frontiers. (further analysis of Piauí's Land Regularization and Agriculture context and policies are presented in Annexes V and VI respectively.)

49. **Cattle ranching is the state's traditional agricultural activity.** The state's cattle herd has been growing steadily and reached nearly 1.7 million in 2010. Most of this activity is carried out by small farmers; 70 percent of ranches raise 20 animals or fewer.

50. **The Cerrado region of Piauí covers about 37 percent of the state, mainly in the southern and southeastern parts.** Its climate, rainfall and soils are conducive to the cultivation of soybeans and corn, among other crops. This region is sparsely populated and started being occupied 15 years ago by farmers and ranchers from southern Brazil who were attracted by the quality of the area for growing cash crops, especially soybeans. Soybean cultivation in Piauí yields the highest productivity in the country, reaching 3.3 tons/ha in 2008. As a result, soybean

⁵ IBGE, 2010 Census.

⁶ IBGE, *Contas Regionais do Brasil*, 2004–2008

production in Piauí increased by 761 percent in the past decade, while corn, planted as a second crop on the same farms, increased by 49 percent.

51. Conservation of the natural resources that sustain agricultural production and preservation of biodiversity threatened by agricultural expansion are key concerns for the state. The state's environmental challenges vary by region, and are essentially related to: (i) land (soil) degradation through improper land use and agricultural practices, (ii) loss of biodiversity due to conversion of native vegetation to agricultural use, (iii) and inadequate management of ground and surface water resources. (further analysis of Piauí's environmental context and policies is presented in Annex VII)

52. There are about 93,400 km² of Cerrado biome in the State of Piauí. By 2010, about 19,300 km², or 21 percent of the original vegetation, had been cleared as a result of agricultural expansion in the Cerrado of Piauí, of which 5,193 km² (5.6 percent) were cleared between 2002 and 2010. Twenty-five municipalities in Piauí are designated by law as belonging to the Cerrado biome⁷. These account for 71.5 percent of the production of annual crops in the state, but also for 75.5 percent of Cerrado deforestation in the 2009–2010 period. Four municipalities (*Baixa Grande do Ribeiro, Uruçuí, Palmeira do Piauí* and *Currais*) were on the national list of twenty municipalities in the Cerrado with the largest deforested area in the 2009–2010 period in the country, ranking 1st, 2nd, 13th and 18th, respectively. They accounted for 39 percent of all Cerrado deforestation in Piauí in that period.

53. The recent high deforestation rates appear to be more a result of the rapid expansion of agriculture in the previously unoccupied Cerrado region than of a lack of control of illegal deforestation by the State Environmental Agency. State legislation requires a Legal Reserve of 30 percent (stricter than the 20 percent required by federal legislation) and the preservation of riverbanks, steep slopes, etc. classified as Permanent Preservation Areas (*Áreas de Preservação Permanente, APP*). The remaining area of the property can be cleared contingent upon receipt of an authorization to do so. Such authorization is valid for up to three years, so not all clearing needs to be done in a single year.

54. The challenge for the Government of Piauí is to strengthen its presence and effectiveness in environmental management, and to be ahead of the moving frontier rather than following behind private sector trends. Piauí has made great strides in recent years in developing the legal and institutional basis for environmental management. These include the adoption of laws for an Environment Policy of the State of Piauí, a Water Resources Policy, a Forest Policy, and the creation of environmental licensing and law enforcement capacity. The state also took over the responsibility for forest management authorizations and forest law enforcement from the Federal Government, while also adopting, in its Cerrado region, stricter Legal Reserve requirements than those of the federal Forest Code. Piauí also created state-protected areas to promote ecological corridors. This is the case of the Chapada da Serra Branca Ecological Station (21,587 hectares) linking the *Serra da Capivara* National Park and the *Serra das Confusões* National Park.

55. Piauí has a relatively high share of people living in extreme poverty, especially in rural areas. The extremely poor represent 21 percent of Piauí's population compared with

⁷ MMA/IBAMA/CSR, Relatório técnico de monitoramento do desmatamento no bioma Cerrado, 2002 a 2008: Dados Revisados, Novembro 2009; MMA: Monitoramento do Desmatamento nos Biomas Brasileiros por Satélite, Monitoramento do Bioma Cerrado 2009–2010, Agosto 2011

the national average of 8.6 percent. In addition, about 64 percent of extremely poor population in Piauí live in rural areas.⁸ Land concentration and land regularization are two major issues related to rural poverty in the state. According to 2006 census data, the state had 245,378 agricultural establishments and an agricultural area of 9.5 million hectares. About 46 percent of the producers controlled just 9 percent of the agricultural land in the state but did not hold land tenure rights. The degree of land concentration, as measured by the Gini Index, remained high at 0.855.⁹

Education Sector

56. Piauí’s performance in the education sector is poor. The state’s illiteracy rate has been improving during the decade but is still high, with 23.4 percent of illiterate people aged 15 or older in 2009, when compared to the national illiteracy rate of 10 percent. It is the second-worst state rate, lower only than that of Alagoas (24.6 percent). In the nine first years of basic education¹⁰, the repetition rate of 16.4 percent places the state behind only Sergipe’s rate of 23 percent. At this same education level, in 2009 the dropout rate of six percent was six times higher than those for São Paulo and Santa Catarina. In secondary education, the dropout rate is the greatest challenge: 22 percent of students at this level leave school and this rate is again the highest in the country. (further analysis of Piauí’s education context and policies is presented in Annex VIII)

57. Access to fundamental education (grades 1 to 9)¹¹ has improved. However, there is still a need to provide access to this level of education to the most vulnerable and low-income groups, mainly those living in rural areas. The situation is even more severe in secondary education.

58. The quality of education is low, as measured by national evaluations (Table 2). Students’ performance, through the Basic Education Development Index (IDEB) shows some progress in recent years. However, significant improvements are still needed, mainly in secondary education. The 2009 IDEB scores for Piauí’s state schools in the 4th and 8th grades are 3.8 and 3.4, respectively, above the Northeast average (3.7 and 3.0) but still far below the national average (4.9 and 3.8). In the same year, the IDEB score for secondary education in Piauí was 2.7, the lowest in the country.

Table 2. IDEB for Piauí’s state schools, 2009

	Fundamental Education						Secondary Education		
	1 st to 4 th grades			5 th to 9 th grades			2005	2007	2009
	2005	2007	2009	2005	2007	2009			
Brazil	3.9	4.3	4.9	3.3	3.6	3.8	3.0	3.2	3.4
Northeast	2.9	3.3	3.7	2.6	2.8	3.0	2.7	2.8	3.1
Piauí	2.6	3.2	3.8	2.6	3.1	3.4	2.3	2.5	2.7

59. Late entrance to school and repetition generate severe age-grade distortion throughout the system (38.1 percent in 2009 in public state schools in terms of basic

⁸The population of Piauí represented just 1.6% of the Brazilian population, but the extremely poor Piauíense population represented 4.1% of extremely poor Brazilians.

⁹The state’s Gini Index of land concentration has slowly declined. It equaled 0.896 in 1985; 0.873 in 1995; and 0.855 in 2006.

¹⁰In the Brazilian education system basic education includes preschool (4to 5 years-old), fundamental education- grades 1 to 9 (*ensino fundamental*), and secondary education- grades 10 12.

¹¹The first nine years of basic education.

education). Age-grade distortion further exacerbates dropout rates as student's age and the opportunity cost of staying in schools rises owing to the need of socially vulnerable youths to enter the labor market early.

60. **As in other parts of Brazil, the main responsibility of the state-run education system is secondary, technical and adult education (accounting for about 70 percent of enrollments at those levels),** while enrollments in state-managed fundamental schools are less than 19 percent of the total at that level, with municipalities being the main provider. Thus, issues of low learning performance and age-grade distortion in the state-run system are to some extent inherited from the poor-quality fundamental education provided by municipalities.

61. **The various obstacles faced by the state public education system include: (i) insufficient coverage of basic education, mainly at the secondary level; (ii) low learning outcomes; (iii) inefficient school management; and (iv) low management, monitoring and evaluation capacity of the education system.**

III. The Government Program and Participatory Processes

Government Program

62. **Until recently, the GoP did not have a broader, more holistic set of policies in place to guide development in the agricultural sector.** In particular, the link between agricultural development and productive inclusion and thus eradication of rural poverty had not been expressed in greater detail. Interventions in the sector were rather ad hoc and at project level, mainly through partnerships and often with different development institutions. In the past 10 years, the GoP identified the potential of agriculture as a lever to promote the state's development. Since then, the GoP began using a more concerted policy approach to agricultural development. One of the first priorities was to improve existing key productive areas, especially cattle ranching, through the policy to eradicate foot-and-mouth disease. In addition, a broad irrigation program was conducted in collaboration with federal agencies.

63. **The Government of Piauí (GoP) has developed an ambitious program for the next Strategic Multi-Year Plan 2012–2015. The GoP's aim is to provide the basis for green growth with social inclusion based on the establishment of agricultural productive chains in the state.** In this regard, over the past few years the GoP has begun a program to transfer land to small farmers and to sell land to large farmers, while developing mechanisms to attract agribusiness that can add value locally, creating jobs and increasing state revenues. At the same time, the GoP has improved the offer of literacy programs, mainly for those 15 years or older, with special emphasis on programs for the rural population through a digital inclusion program to increase access to secondary education for those in small municipalities and in the rural area. The GoP is also making a strong effort to improve education, including at the technical level, so that the population can benefit from the expected jobs to be created in the state.

64. **Within the above context the GoP has to formulate a comprehensive approach to agricultural development, as identified: (i) ensure a balance between large-scale and family farming, (ii) promote land tenure regularization, (iii) ensure compliance with environmental policy and promote environmentally friendly practices, and (iv) provide**

education opportunities for supporting sustainable agriculture¹². The policies, which are supported by this Piauí DPL and described in Chapter 5 (Proposed Operation), are aimed at addressing these challenges.

65. **Basic Rural Infrastructure:** Over the past 15 years, the Cerrado region has become more accessible through the establishment of transport infrastructure, especially roads connecting Piauí's cities and ports, and agricultural growth has accelerated. In addition, markets for the state's agricultural products have benefited greatly from rising international food prices since 2008. Improved infrastructure is expected to greatly benefit agriculture, particularly in the southern part of the state where newly introduced technologies are already supporting greater soybean and cotton production in the Cerrado. However, rural poverty remains a substantial challenge; the demand for basic rural infrastructure is ultimately linked to poverty reduction and the improvement of agricultural production chains.

66. **Land Regularization:** Consistent with the Federal Government's policy and its own goals to improve agricultural productivity, for three decades the GoP has been implementing a land tenure regularization program both within and outside of settlement projects. Since 1988, the main instrument of land disposal changed from outright titles to the Concession for the Real Right of Use. Since 2006 this program has been accelerated through a partnership between the Piauí Land Institute (*Instituto de Terras do Piauí*, INTERPI) and the National Institute for Colonization and Agrarian Reform (INCRA). Likewise, the vulnerable status of *quilombola* communities' land claims received new attention after the 1988 Constitution and the subsequent passage of a 1995 Federal Decree with implementation begun across states, including Piauí. Key activities in these regularization programs have been the clarification of the identity of occupants as well as the georeferencing of occupied parcels. In the process, the GoP has also begun distinguishing the extent of land in various municipalities according to its land tenure status, e.g., private land registered in the public notary offices (*cartórios*), municipal land, state land, and as yet unclaimed land (*terras devolutas*) that will eventually become state land. Law 5.966 of 2010 was a deliberate attempt to expedite regularization with an emphasis on the valuable Cerrado region. However, land tenure regularization in the rest of the state and for small farmers continues to be a challenge.

67. **Environmental Licensing:** Over the past decade, the state has made strides to meet environmental challenges, particularly with regard to rural areas. It created a government secretariat concerned with environmental and water resources management and gradually increased its staffing; adopted legal frameworks for water management, landscape planning and forest policy, as well as incentives for municipal environmental management; created and maintained a State Environmental Council, a State Water Resources Council, a State Zoning Commission and a State Environmental Fund; prepared a State Water Resources Plan and a State Plan to Combat Desertification; and proposed legislation to address climate change issues. In

¹² The single best indicator of basic education impact on economic development is the additional productivity of workers or farmers with more education over those with less. Productivity indicators show the direct link between education and the capacity to produce, and, hence on the potential to increase economic output. A survey done for the World Bank on 18 studies that measure the relationship in low-income countries between farmers' education and their agricultural efficiency (as measured by crop production) concluded that a farmer with four years of fundamental education was, on average, 8.7 percent more productive than a farmer with no education. The survey also found that the effect of education is even greater (13 percent increase in productivity) where complementary inputs, such as fertilizer, new seeds or farm machinery, are available. "Martin Carnoy: The Case for Investing in Basic Education. UNICEF, New York 1992, p. 26, 34 and 41.

2007, the GoP began to issue environmental licenses and forest clearing authorizations and created State Protected Areas. Initial zoning activities focusing on the Cerrado region have been contracted. With the state's current land tenure situation, the challenge for the environmental agency is to identify who should be requesting the license or permit and thus be responsible in case of illegal activities.

68. **Education:** The Government of Piauí has been following the Federal Government's program for 2008–2011, which stresses "Development with Social Inclusion and Quality of Education" and is based on three pillars: (i) a Social Policy Agenda, which includes objectives such as increasing years of schooling and technical training; (ii) the Educational Development Plan (*Plano de Desenvolvimento da Educação*, PDE), which includes objectives such as improving the quality of primary education, and promoting learning achievement and student attendance; and (iii) the Federal Program for Accelerating Growth (*Programa de Aceleração do Crescimento*, PAC) which contains a set of economic policies to accelerate economic growth in the country. In this scenario education has a special role in preparing higher-skilled and more capable workforce and expanding opportunities for the poor in terms of job and income.

69. **The Piauí's Education Coordinated Action Plan (PAR) was structured in 2007 in four major areas:** (i) education management; (ii) training of teachers and other technical staff working in the sector; (iii) strengthening the teaching methodologies for improving the evaluation of learning and education; and (iv) improving school infrastructure, teaching materials and equipment to support learning.

70. **Public Administration:** As one of Brazil's poorest states, Piauí has an enormous demand for social and economic advances. From a conservative fiscal policy approach, over the past decade the state has regained a minimum investment capacity to cope with this demand. The state has been seeking to increase its management capacity in order to improve its ability to increase the quality of public spending. The recent advances include: (i) the creation of the Internal Control Agency; (ii) the creation of the State Retirement Fund; (iii) the creation of the School of Government; (iv) the implementation of a performance evaluation system for public employees; (v) the implementation of participatory territorial planning; (vi) the development of systems for the preparation of the Multi-Year Plan (*Plano Plurianual*, PPA); (vii) the Annual Budget Law (*Lei Orçamentária Anual*, LOA); and (viii) the deployment of an Integrated Financial Administration System for States and Municipalities (SIAFEM). The next challenge is to adopt the Results-Based Management (RBM) approach.

Participatory Processes

71. **This multisectoral operation will support policies in three major areas: (a) green rural growth, including land regularization (focused on the Cerrado and Afro-descendent quilombola communities), sustainable agriculture and environmental conservation; (b) education and youth policies; and (c) state public sector governance.**

72. **According to State Complementary Law No. 87 of August 22, 2005, the planning process of the Government of Piauí should be participatory with a territorial approach.** The participatory process is organized by two major Councils: the Territorial Councils for Sustainable Development (CTDs) (one for each one of the eleven territories) and the State Council for Sustainable Development (CEDS). These Councils serve as fora for participatory discussion of major issues affecting the State and for the validation of the general strategies of Government.

73. During 2010-11, the GoP held 11 territorial fora to discuss the State Pluriannual Plan 2012-2015 (PPA). The participatory process includes two intrinsically-related levels of dialogue intra-government and between government and civil society. The number and profile of participants are shown in Table 3.

Table 3. Number and profile of participants during the 11 PPA territorial forums

Total of participants	Council Members		Profile			
	Public sector	Civil Society	Men	Women	Urban	Rural
			677	131	365	54%

74. **Following a sectoral approach, Decrees 8,925/93 and 9,533/96 have defined the mission, composition and operation of the State Environmental Council (*Conselho Estadual do Meio Ambiente*, CONSEMA), which holds deliberative power regarding state environmental policies. CONSEMA is composed of state, municipal and civil society representatives who meet bimonthly. CONSEMA also includes three technical chambers (on environmental issues, urban development issues, and water and sanitation issues), which work as its advisory boards.**

75. **Regarding rural development, the previous generation of the Bank-supported Rural Poverty Reduction Project contributed to the formation and operation of deliberative municipal councils in 222 municipalities.** These councils were predominantly composed of representatives from rural communities. Their operation has led to a better interface between communities and local authorities, more effective representation of poor family farmers in decision-making processes at the municipal level, and greater transparency and social control over municipal decisions. Improved civil participation and strengthened social capital have been pointed out as major outcomes of this participatory methodology.

76. **The state Government has also established the State Environmental and Water Resources Council (*Conselho Estadual de Meio Ambiente e Recursos Hídricos*) and the State Environmental Education Council (*Conselho Estadual de Educação Ambiental*).** Both ensure the participation of civil society in the decision-making process on environmentally related matters.

77. **In the State of Piauí, educational policies are discussed at and deliberated on by the State Council of Education (*Conselho Estadual de Educação*, CEEPI), which was created by Law 2,489/1963 and modified by Law 4,600/1993.** CEEPI is composed of thirteen members who are nominated by the state's governor and approved by the State House of Representatives. Its members are nominated for periods of four years, but every two years, one third of the council members are renewed. CEEPI meets weekly.

IV. Bank Support to the Government's Program

A. Relationship to the Country Partnership Strategy (CPS)

78. **The proposed DPL operation is fully consistent with, and closely aligned to, the objectives of the Brazil CPS for 2012–2015 (Report 63731-BR), discussed by the Executive Directors on November 1, 2011), especially with the objective of developing new partnerships at a subnational level, and focusing on the country's pending environmental and poverty reduction challenges.** The policy framework supported under the DPL aims to contribute to the State of Piauí's efforts to address the challenges of expanding sustainable agriculture while improving environmental compliance of land use and land tenure security; improving the

coverage and quality of education for the poor; and increasing the efficiency of fiscal and public sector management. The policies supported by this DPL will also have a positive impact and will contribute to improving important socioeconomic indicators, such as educational attainment, employment, and income distribution, which have been resistant to change among the most disadvantaged groups of the population. Furthermore, the policies are expected to have a positive impact on the state's performance and evaluation of strategies regarding the allocation of resources and policy decision making.

79. This proposed DPL is the first operation of a broader Bank and GoP partnership which will be followed by a Sector-Wide Approach (SWAp) investment operation. The SWAp would focus on the implementation of the policy reforms and programs considered in this DPL and other key areas such as health and water resources management, enhancing the Bank's longer-term engagement with the GoP to promote development with social inclusion in Piauí. The goal of this partnership is to help Piauí to improve its effectiveness and efficiency in delivering public social services, sustainable agricultural production and natural resources management, and to improve its capacity to manage public investment.

B. Collaboration with the IMF and other Donors

80. This loan is to a subnational government rather than to the Federal Government, and the IMF does not work directly with state Governments. A description is presented below of the consultation process between the Bank and Fund teams in the case of Brazil. This is consistent with the recommendations of the Joint Management Action Plan (JMAP),¹³ which, in order to improve coordination at the country level, called for Bank and Fund staff to consult at least annually in the preparation of their work programs.¹⁴

81. Brazil country teams from the Bank and the Fund have been meeting regularly. On average the economists' team has met once every three months and the lead economists/sector leaders meet twice a year. Visits are held during Article IV missions and presentations, and peer reviews are conducted on projects. The primary objective of these consultations is to inform the other institution of ongoing projects and studies. The secondary objective is to share views about the direction of macroeconomic policies considered by the government and their effectiveness, and to discuss and coordinate each other's sectoral and macroeconomic priorities. During Bank–Fund consultations, country teams share views on the country's overall macroeconomic situation and discuss recent economic policies. The Bank also shares with the Fund progress on and findings of Bank economic studies. Because of its engagement at the subnational level and at the sectoral level, the Bank brings this perspective to the discussion.

82. The outcome of the consultation is a short joint memorandum and “action matrix” summarizing the main issues discussed and the work program for the next 12 months. The memorandum and action matrix include: (a) identification of analytical work of joint interest; (b)

¹³ See “Enhancing Collaboration: Joint Management Action Plan (Follow-up to the Report of the External Review Committee on World Bank-IMF Collaboration,” September 20, 2007.

¹⁴ A February 2008 memorandum from IMF First Deputy Managing Director Lipsky and World Bank Managing Director Wheeler to IMF Heads of Area Departments and Bank Regional Vice Presidents indicated that, beginning in April 2008, all Bank country teams and Fund missions preparing CAS/CAS progress reports or Article IV consultations (whichever came first) should hold annual discussions to pool analytical and diagnostic work, discuss macro-critical sectoral and other issues, and strategize over how best to sequence needed analytical work.

tentative mission dates; and (c) expectations for main programs, projects, technical assistance and lending operations for the period ahead.

C. Relationship to other Bank Operations

83. Until recently, IBRD support to the State of Piauí was limited to investment projects in rural and urban development. The Rural Poverty Reduction Project (P050881-BR State SIL), approved in June 2001 and closed in January 2010, assisted the State of Piauí to reduce levels of rural poverty by improving the well-being and income of the rural poor through better access to basic social and economic infrastructure and services. The project supported productive activities, increasing the social capital of rural communities to organize collectively to meet their own needs, and enhancing local governance through greater citizen participation and transparency in decision making.

84. IBRD also supports a municipal level project in Piauí. The Teresina Enhancing Municipal Governance and Quality of Life Project (P088966-BR Municipal APL), approved in August 2008, supports improvements in the Teresina Municipal Government's management capacity in the areas of financial, urban, environmental, service delivery and economic development.

85. The proposed operation takes into account experiences from other Bank operations in Brazil in the environmental, agricultural, education and public management sectors. The relevant operations for the environmental and agricultural agendas are the First Programmatic Development Policy Loan for Sustainable Environmental Management (P095205), the Environmental Sustainability Agenda TAL (P090041), and the Brazil Rural Environmental Cadastre Technical Assistance Project (P120523).

86. For the education component, the proposed DPL draws lessons from the Pernambuco Education Results and Accountability Project (P106208), the Pernambuco Integrated Development: Education Quality Improvement Project (P069934), and other Bank-supported projects developed in Rio de Janeiro, Minas Gerais and Ceará. For public management reforms, the Fiscal Space for Efficiency and Growth Development Policy Loan (P111665) provides insightful experiences in creating fiscal space as measured by increased gross operating balances for increasing investments in the provision of essential services, improving the quality and efficiency of public service delivery in key sectors, and strengthening institutional capacity to carry out cross-sectoral functions in order to sustain efficiency in public service delivery for the medium term through results-based management.

D. Analytical Underpinnings

87. The proposed operation builds on a number of reports and studies commissioned and carried out by the World Bank and in-country partners, including the GoP and the São Francisco and Parnaíba Valleys Development Company (CODEVASF). The areas of analytical underpinnings are detailed below.

88. Agriculture and Rural Development: The Implementation Completion and Results Report: Piauí, Rural Poverty Reduction Project, prepared by the World Bank summarizes the implementation progress and results achieved by the project. The project aimed to reduce high levels of rural poverty by improving the well-being and incomes of the rural poor through better access to basic social and economic infrastructure and services and support for

productive activities. The lessons learned from this ICR include: (i) the depth of poverty in Piauí and the massive demand for community and municipal investment require a more pragmatic, coordinated approach to benefit targeting, (ii) projects need to invest in continuous training and participatory institutions (Councils and associations), and (iii) the municipal Councils require a regular, transparent budgeting process. This analysis was used in the design of the Progere program which is supported by this proposed DPL.

89. Land Regularization: Experience with respect to land tenure regularization has been drawn from a series of analytical pieces undertaken by the Bank in recent years culminating in the most recent report: *Legalizing Brazil*. This Report emphasizes the progressive strides made in the institutional setup for land regularization in Brazil while pointing to the need to increase the adaptation of Federal laws at State level. It also found the combined approach to land tenure regularization and environmental compliance in the state of Pará to be worth emulating. Finally it stressed a continuing role for intermediate forms of land tenure such as Concessions of the Right of Use in the landscape of Brazil if attempts at regularization are to reach significant scale in the short to medium term. Another recent Bank study on land administration in Brazil indicates that those with precarious land claims tend not to comply with the environmental law carry out most of the illegal deforestation, and adopt unsustainable agricultural practices that lead to land degradation. This analysis was fundamental to guide the preparation of the Land regularization law which is supported by this proposed DPL, moving the policy from land use rights to land titles and including environmental requirements as part of the regularization process.

90. Environment: CODEVASF prepared a comprehensive study “Water Resources Master Plan for the Parnaíba River Basin” prepared with support from PROAGUA/Semi-Árido. The study covered all but one of the 224 municipalities in Piauí. It divides the state in 11 regions according to land use, climate and socioeconomic aspects. It provides a basis for Environmental Economic Zoning and land-based policies. It also confirms the importance of Cerrado for the state’s rural development and the different land prices based on potential productivity.

91. During the past 15 years, the World Bank carried several AAAs focused on causes of deforestation of Brazilian Rainforests. Many of those lessons and analyses related to government policies and farmers’ behavior are applicable to other Brazilian biomes. Studies indicate that 70 percent of the deforested area in the Amazon is used for livestock production, and that effectiveness of the new system to authorize and monitor legal deforestation in rural properties was low, as the participation of farmers and ranchers is not mandatory. These issues have been addressed by a set of reforms including the resolution 3545 by the National Monetary Council which determines that, in the case of agribusiness, the financial institutions must ensure that the borrower provides the proper environmental licenses not only for its operation but also for the entire productive chain “upstream”. Therefore, ranches and farms supplying the processing industry in the Amazon must ensure compliance with the environmental law and registration in the national land cadastre.

92. The recent evaluation of the Plan to Prevent and Combat Deforestation in the Amazon concluded that the establishment of the Rural Environmental Cadastre (CAR) in combination with the National Monetary Council resolution 3545 were important in the sharp decrease of deforestation rates in the past few years. Consequently, the recently launched Federal Plan to Prevent and Combat Deforestation in the Cerrado follows the same

approach and will be applied in Piauí. This analysis was fundamental to guide the preparation of the State Rural Environmental Cadastre law which is supported by this proposed DPL.

93. **Recent studies¹⁵ indicate that 800,000 km² of Cerrado (39.5 percent of the region) have been already deforested. Cattle ranching (26.5 percent) and annual crops (10.5 percent) are the main land use.** Meanwhile, Piauí is the state with the lowest total deforestation (8 percent of the Cerrado) while São Paulo has the highest total (85 percent). Thus, the indications are the expansion of agriculture in the Cerrado tend to occur in Piauí and its neighboring states

94. **Education: Experience has been drawn from several studies and programs developed by other states in Brazil and particularly in the Northeast states, which have similar problems.** Another study recently finalized by the Bank, “Achieving World-Class Education in Brazil: The Next Agenda”,¹⁶ shows the major advances and pitfalls of Brazilian education in the last 15 years and outlines the next agenda for improvements in education at the different levels. These lessons have been incorporated in projects for states seeking improvements in education. In addition, the Bank study “Knowledge, Innovation for Competiveness in Brazil”¹⁷ provides a cross-sectoral analysis of Brazil’s capacity for producing knowledge and innovation, and also pointed out the need to re-evaluate the Brazilian education system, its information technology infrastructure, and its policy framework for encouraging innovation to ensure that its economy as a whole is growing fast enough to keep up with the global competition while also guaranteeing progress in its fight against poverty. Other important lessons were taken from a series of studies on (i) the impact of distance learning using videoconference and other technologies on student’s performance; (ii) distance education for agriculture and rural development; and (iii) studies that addresses civic engagement programs and youth development.¹⁸

95. **Public Management and Fiscal Sustainability: The Piauí State Economic Memorandum, Managing a Natural Inheritance¹⁹, prepared by the World Bank focused on identifying the main social and economic issues in Piauí.** It also recommends strategies and actions to the state Government to raise the profile of natural resource management, prioritization of infrastructure and human capital investments, and reengineering public spending. The ESW report “Brazil: Improving Fiscal Conditions for Growth” addresses important policy issues relating to budget rigidity and expenditure management that contributed to the assessment of fiscal and public sector management challenges faced by the GoP. This analysis was fundamental to guide the preparation of the Public Management supported by this proposed DPL.

¹⁵ Sano et al. 2008; Sano et al. Embrapa, 2006.

¹⁶ Achieving World-Class Education in Brazil: *The Next Agenda*, December 21, 2010. World Bank

¹⁷ “*Knowledge, Innovation for Competiveness in Brazil*” 2008. The World Bank

¹⁸ Cook, Jonthan, “Distance Education for agriculture and rural development, The Third Wave,” 1998, The University of Reading; Maclughlin et al. “Impact of Distance Learning using videoconferencing Technology on student performance” *American Journal of Pharmaceutical Education* 2004. and Michelsen, Zaff, and Hair, “Civic Engagement Programs and Youth Development: A synthesis” *Child Trends*, 2002. http://childtrends.org/what_works/clackwww/civic/civicrpt.pdf

¹⁹ Report No. 24484-BR

V. Proposed Operation

A. Description of Operation

96. **The Program Development Objective of this multisectoral DPL is to support the GoP in the implementation of its efforts to achieve higher rates of green, inclusive growth.** In particular, it supports the government's strategy to develop policy reforms and programs which:

- i. promote statewide rural green inclusive growth by: (a) improving land tenure security, (b) promoting sustainable agricultural practices, and (c) ensuring environmental sustainability;
- ii. promote inclusive growth through improved statewide public education and a strengthened role for youth in the labor market; and
- iii. promote fiscal sustainability through a strengthened institutional framework for efficient public service delivery through the creation and implementation of a results-based management tool within the public sector.

97. **These three components were selected in partnership with the state government on the basis of a shared assessment of their relevance to the GoP's development objectives, feasibility, and the value added that the Bank can bring to the reform agenda.** Together, the policy reforms to be implemented under these three components will contribute to fostering a new development cycle in Piauí and to establish the foundations that will allow Piauí to become a state with improved public service delivery and which guarantees equal opportunities for its population.

98. **Disbursement of the single tranche (US\$350 million) would recognize the Government's reform efforts since the current administration took office in January 2011.** The World Bank and the State Government of Piauí have consequently agreed upon the prior actions listed in Table 10 as conditions for disbursement of the tranche of the DPL.

Box 1: Good Practice in Policy Lending

Principle 1: Reinforce Ownership. The policy reforms supported by this operation are included in the state's Strategic Multi-Year Plan 2012–2015. (PPA) developed through a clear participatory process. During the project preparation phase, the Bank undertook a poverty and social impact analysis eleven which included focus group meetings and interviews in the state capital and in three municipalities of the Cerrado region. About 150 people were heard during these consultations; they included representatives of Cerrado soybean producers, family farmers, and rural workers' unions; *quilombola* communities and statewide *quilombola* organizations; principals, teachers and students of state schools; municipal authorities and staff of state and federal agencies. There was a general consensus that the policy reforms supported by the operations can be expected to have significant and positive poverty alleviation and social development impacts in the State of Piauí

Principle 2: Agree up front with the Government and other financial partners on a coordinated accountability framework. The proposed loan is based on a coherent framework of previous actions and expected outcomes that is based on the GoP's program and was widely discussed with all involved secretariats (SEFAZ, SEPLAN, SEDUC, SDR, SEMAR) and agency (INTERPI) .

Principle 3: Customize the accountability framework and modalities of Bank support to state circumstances. Bank support does not include any sensitive policy reforms; rather, support is fully aligned with the sustainable development goals included in the state's 2012-2015 Plan which aims to promote development with social inclusion, quality education, and care for the environment. The monitoring framework was designed considering existing and planned monitoring mechanisms of the Government. The Bank and GoP intend to continue the partnership with a follow-on Sector-Wide Approach (SWAp) project that would focus mainly on the implementation of investments needed as a result of the policy reforms and programs considered in this DPL, enhancing the Bank's longer-term engagement with the GoP to promote sustainable development with social inclusion.

Principle 4: Choose only actions critical for achieving results as conditions for disbursement. The current operation has a policy matrix focused on three strategic areas (green growth in rural areas, management and learning outcomes of public schools, public, management efficiency) which address the priorities of the state.

Principle 5: Conduct transparent progress reviews conducive to predictable and performance-based financial support. The proposed operation is timed to the state’s budget cycle, with timing agreed in discussions with the SEFAZ based on the current review of the operation’s prior actions. The policy matrix also indicates a limited number of outcome indicators that are closely linked to the supported policy actions.

B. Policy Areas

99. **The proposed DPL operation would support the GoP’s vision of promoting the development of the state through the expansion of sustainable agriculture with social inclusion.** This operation supports state policies and programs that: (i) promote green inclusive growth in rural areas through the improvement of land tenure security, sustainable agriculture, and environmental sustainability; (ii) promote inclusive growth through the enhancement of access to basic education, increased learning outcomes of public schools, and strengthened participation of vulnerable youth in public policies and programs; and (iii) promote fiscal sustainability through increased efficiency in public expenditure management. The policy framework and the expected results are described in detail on Table 4. Detailed additional information and analysis on these policy areas are presented in Annexes IV to VII.

Table 4. Piauí DPL actions and policy development matrix

Policy Area	Policy Actions: Single-Tranche Prior Actions (Completed)	Outcome Indicators by June 2013
Component A. Promote Green Inclusive Growth in Rural Areas		
Sub-component A1. Improve Land Tenure Security		
Regularize land tenure for small family farmers and larger producers with particular focus on the Cerrado	<ul style="list-style-type: none"> State Law No. 6,127 of November 21, 2011 approved, authorizing donation of land to family farmers occupying and/or working said land and sale to larger-scale producers occupying and working the land for at least 5 years 	<ul style="list-style-type: none"> 100% increase in the number of applications for rural land tenure regularization submitted to INTERPI 15% increase in the number of eligible Common PRONAF (excluding PRONAF A and B) credit applications received
Regularize land tenure for quilombola communities	<ul style="list-style-type: none"> Decree No. 14,625 of October 31, 2011 enacted, creating the Program for Land Regularization for <i>Quilombola</i> Communities 	
Sub-component A2. Promote Sustainable Agriculture		
Increase employment and income in family farming: productive inclusion	<ul style="list-style-type: none"> Complementary Law No.162 of December 30, 2010 enacted, creating the Directorate of Rural Poverty Alleviation under the Secretariat of Rural Development (SDR); and the Decree No.14,626 of October 31, 2011 enacted, creating the “State Program for the Elimination of Rural Poverty” (PROGERE), and the Program Unit to manage it 	<ul style="list-style-type: none"> PROGERE operating in 112 municipalities
Sub-component A3. Ensure Environmental Sustainability		
Promote sustainable use of rural landscapes	<ul style="list-style-type: none"> State Law No. 6,132 November 28, 2011 approved, creating the Rural Environmental Cadastre 	<ul style="list-style-type: none"> 130,000 ha of land registered in the CAR in the Cerrado region.

Policy Area	Policy Actions: Single-Tranche Prior Actions (Completed)	Outcome Indicators by June 2013
Component B: Improve Access to and Quality of Education		
Sub-component B1. Improve Access to Basic Education		
Increase access to secondary education programs	<ul style="list-style-type: none"> Decree No. 14,628 of October 31, 2011 enacted, creating the program to introduce technology and distance learning strategies in the provision of secondary education 	<ul style="list-style-type: none"> 20% increase in the number of enrollments in secondary education through the use of the Piauí Digital Program and other technologies
Sub-component B2. Improve Management and Learning Outcomes of Public Schools		
Improve quality of basic education in the state	<ul style="list-style-type: none"> Decree No. 14,627 of October 31, 2011 enacted, establishing remedial/accelerated learning programs to decrease age-grade distortion and improve flow and quality of basic education in state public schools 	<ul style="list-style-type: none"> Decrease, by at least 1 percentage point annually, from 38.1 in 2010 to 36 by June 2013, in the percentage of children more than two years behind grade level in grades 1 to 4 in state public schools
Strengthen School Management and learning outcomes for public schools	<ul style="list-style-type: none"> Decrees No 14,385 of January 13, 2011 and No 14,607 of October 14, 2011 enacted, establishing the system of merit-based selection for regional managers and school principals respectively 	<ul style="list-style-type: none"> Selection of all the regional managers through the new selection process ,and at least 80% of school principals selected according to Decree 14,607²⁰
Sub-component B3. Strengthen the Participation of Vulnerable Youth in Public Policies and Programs		
Promote policies for increased social & economic inclusion of youth	<ul style="list-style-type: none"> Complementary Law No. 162 of December 30, 2010 approved, creating the State Coordination Agency for Youth 	<ul style="list-style-type: none"> 50% increase in number of Municipal Youth Councils created by <i>portaria</i> from 8 Municipal Councils in 2010.
Component C. Increase the State's Public Management Efficiency		
Strengthen the institutional framework for efficient public service delivery	<ul style="list-style-type: none"> Decree No. 14,637 of November 22, 2011 enacted, creating a results-based management system and a GoP Steering Committee to monitor a portfolio of priority projects linked to the Strategic Multi-Year Plan 2012–2015 	<ul style="list-style-type: none"> 60% of state projects or programs included in the results-based management system

Component A: Promote Green, Inclusive Growth in Rural Areas

100. **Objectives:** The Government's objective is to promote green, inclusive growth through the design and implementation of an integrated set of policy reforms aimed at: (i) improving land tenure security, (ii) promoting sustainable agriculture, and (iii) ensuring environmental sustainability.

²⁰ This includes the 484 schools, which have more than 200 students, plus the secondary and technical-vocational schools.

Subcomponent A1: Improve Land Tenure Security

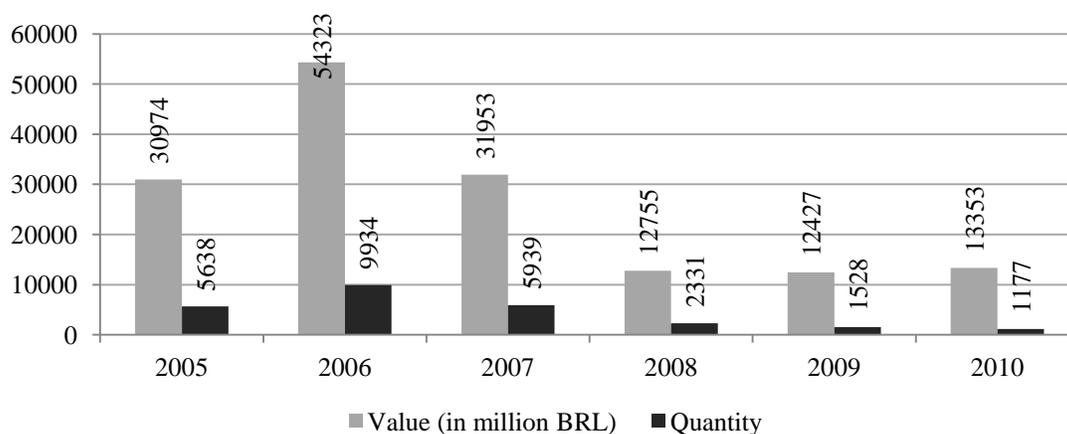
Subcomponent A1.1. Regularization of Land Tenure for Family Farmers and Larger Producers, with Particular Focus on the Cerrado

101. Piauí has 1.3 million hectares of registered state public land and 10 million hectares of *terras devolutas* (vacant lands, generally public but not registered yet as such). About 70 percent are occupied, mainly by small farmers, except in the Cerrado.

102. The State Land Institute (*Instituto das Terras do Piauí, INTERPI*) estimates that there are approximately 9,000 small farmers on public land who currently have direct concessions for use rather than full property titles. For the most part, these properties generally located on state farms are already surveyed or georeferenced using conventional technologies. Despite the history of active cultivation, the lack of formal property titles for these lands excludes these small family farmers from access to formal credit from various sources including Common PRONAF, a major, well-resourced federal agricultural credit program aimed at family farmers. This is believed to be a significant limitation to their productivity as well as a source of socioeconomic vulnerability.

103. Access to Common PRONAF credit requires proof of land ownership as evidenced by a title document. This title is held as collateral if the loan is in excess of R\$20,000, but even when it is less, proof of title is still required. The range of farm sizes for which Common PRONAF credits are typically accessed is approximately 60 to 280 hectares, with the average reported to be about 120 hectares.

Figure 1. Common PRONAF evolution in Piauí (2005–2010)



Source: Banco do Nordeste

104. In fact, the lack of title has been a two-edged sword because it not only implies lack of suitable assets to serve as collateral for the loan but it is also equated with a lack of environmental compliance with land use. Ever since 2007, the banks and especially the Banco do Nordeste, by far the main conduit of PRONAF in Piauí, have seen a significant decline in the number and total value of Common PRONAF credits due to increasing insistence on lending only against properties where the land use is in environmental compliance (see Figure 1).

105. In order to encourage greater agricultural production in the Cerrado region while safeguarding the natural environment, the state Government enacted Law 5,966 in 2010. This law authorized regularization through sale, grant, lease and co-validation of previously issued titles. The passage of this law produced strong interest and was reportedly followed by 1,121 requests for regularization. Of these, 912 applications were for the purchase of plots ranging from 350 to 2,500 hectares, with an average size of 482 hectares. These mainly pertain to land informally cultivated by agribusiness operators. (more details in Annex V)

106. Since 2006, INTERPI, with support of the national land agency, INCRA, has been clarifying occupants' land rights and has georeferenced 10,187 parcels in 21 municipalities. Of these, 417 were found to have no overall claimant but were occupied by approximately 1,800 small family farmers.

Actions Supported by this Operation

107. The Piau  DPL assists the GoP in promoting the regularization of agricultural land occupation in the state for both small and large farmers. As prior action, State Law No. 6,127 of November 21, 2011 was approved by the State Legislative Assembly. The law authorizes grants of land to family farmers and sale to producers occupying and working the land for at least five years. This addresses the outstanding land tenure issues for small-scale family farmers currently cultivating *terras devolutas* throughout the state and informal agribusiness operators, especially those concentrated in the Cerrado region. This new Law includes specific measures to ensure environmental protection and social protection for vulnerable groups. All land sold or granted must be in compliance with the environmental law or the beneficiary must sign an agreement to be compliant within six months of receiving the title. In addition, any land to be sold must first undergo a screening process to ensure that the area is not of high conservation value and is not being claimed by indigenous people or *quilombolas*.

108. This Law also eliminates the geographic jurisdiction of previous legislation but recognizes regional differences and established three different land prices according to their agriculture potential (Cerrado, semi-arid and inter-valleys). The prescribed prices to be paid by occupants of large landholdings (greater than 100ha) are either consistent with or higher than the average prices used by Cr dito Fundi rio (Annex V). Another major improvement of this law is that it not only addresses the regularization of past occupation but also provides a legal framework for future land regulation. The new law stipulates that the state can, in the future, sell unoccupied state land to the private sector through a bidding process which should result in market prices being paid. Finally, the ensuing decree, which regulates the law, stipulates that the land title must be in the name of both spouses in order to ensure gender balance and security for the women.

109. The desired outcomes targeted by this DPL's support for the land regularization in the State of Piau  is a 100 percent increase in the number of applications for rural land tenure regularization submitted to INTERPI, and a 15 percent increase in the number of eligible Common PRONAF²¹ (excluding PRONAF A and B) credit applications received.

²¹ The passage of Law 6,127 of November 21, 2011 has created a pathway to convert most of the 9,000 concessions into titles as well as to complete the ongoing exercise that identified 1,800 additional small farmers with similar vulnerability. Many of the family farmers targeted by the new land regularization law who can own up to 100 hectares to be eligible for land donation, fall in the existing catchment group for Common PRONAF credits but lack access due to their lack of land title. Since "concessions," unlike titles, are generally not accepted as the basis for loans, including investment credit in the form of Common PRONAF, the passage of the law would potentially have a significant impact on expanding

Subcomponent A1.2. Regularization of land tenure for quilombola communities

110. ***Quilombolas*** are communities that represent the remaining members of the runaway slave communities from Brazil's colonial period. *Quilombolas* refer as well to the rural black communities that remained on lands given to them by former slave owners. There is a lack of a precise social science definition of *quilombolas* other than that of a community of slave descendants who identify themselves as *quilombolas* based on a shared history of resistance and a common heritage. These people of African descent have maintained sociocultural distinctiveness in the practice of their unique lifestyles and sharing of a common territory. Living primarily from subsistence agriculture, fishing and hunting and gathering, they have remained largely marginalized from wider Brazilian society, are generally extremely poor, and usually have little access to health, education, land regularization or other services.

111. **To date, INTERPI, in conjunction with INCRA, has promoted the regularization of five *quilombola* communities in the state, totaling 21,215 hectares.** These communities contain 653 families. The average processing time of the regularization process in these areas was two years from the opening of proceedings in INCRA. It is noteworthy that the procedure for regularization of these communities is complex and time consuming, since in addition to the basic steps inherent in the regularization process, registration, delimitation/demarcation of the area and georeferencing are required to submit technical and anthropological reports including self-certification, among others. In areas of state land, historically regularization has proceeded more rapidly.

Actions Supported by this Operation

112. **The Piauí DPL assists the GoP in promoting the regularization of *quilombola* lands. As prior action, a Decree No. 14,625 of October 31, 2011 was enacted by the State Governor, creating the Program for Land Regularization for *Quilombola* Communities.** The GoP realizes that firm action must be taken to speed up the regularization process of *quilombola* areas because the expansion of the agricultural frontier could cause social conflicts. The program, to be housed in INTERPI; will have resources dedicated to processing the claims in a systematic manner. This action, in coordination with State Law No. 6,127 of 2011 (sub-component A1.1) which prevents land being claimed by *Quilombola* Communities to be donated or sold, will ensure that the rights of *Quilombola* Communities will be recognized and respected.

113. **The desired outcome targeted by this DPL's support to *Quilombola's* rights is to increase the number of *Quilombola* communities with land tenure in public areas of the state and accessing rural credit from Common PRONAF.**

Subcomponent A2. Promotion of Sustainable Agriculture and Increasing Employment and Income in Family Farming

114. **This sub-component is directly linked to the GoP's development vision for the agricultural sector, dealing with the promotion of sustainable agriculture and increasing employment and income in family farming.** The broader envelope of GoP policies (not supported by this DPL) geared toward sustainable agriculture comprises several areas that are

the penetration of farm credit, provided small farmers receive appropriate extension services, an issue partially addressed under the Sustainable Agriculture component of the DPL.

mutually complementary, including both large- and small-scale producers and key production chains, including: (i). Piauí's State Animal Health Program aimed at eradicating foot-and-mouth disease (FMD) from the state, (ii) Program on the Safe Use and Management of Agricultural Pesticides aimed at rationalizing the use pesticides e while increasing its safe usage and, (iii) Piauí's Participation in the National Program on Crop Insurance aimed at decrease losses by family farmers. These policies are summarized in Annex VI.

115. Despite its agro-ecological potential, Piauí still suffers from rural poverty. The first generation of a series of interventions known in Brazil as the *Programa de Combate à Pobreza Rural* (PCPR; English acronym RPRP, Rural Poverty Reduction Program), was launched; it ran from 1997 until early 2010. It is estimated that the PCPR in Piauí, implemented mainly by community associations, was able to facilitate about 5,000 small projects in the areas of infrastructure, production and social development, reaching more than 300,000 direct beneficiaries in rural areas. The PCPR Phase I and Phase II Report covering 2002 to January 2010 presents figures that show the financing and implementation of more than 1,900 subprojects under the program, all of which directly favor communities. Roughly 80 percent of the funds were allocated to basic infrastructure and social development (for example water supply, electricity, sanitation and others) and benefited over 124,000 families. Approximately 20 percent of the financing was geared toward subprojects to increase agricultural productivity in areas such as beekeeping, cashew crop farming, small agro-industries, and agricultural mechanization. According to that report, achievements in the area of sanitation and the provision of clean drinking water led to a 38 percent decline in infant mortality and a 70 percent decrease in diarrhea, Chagas disease, asthma and dengue fever.

116. Overall, the PCPR in the State of Piauí provided an opportunity for beneficiary communities to act and decide on their own future and development. A large majority of projects were successful in terms of the accumulation of social capital and access to basic infrastructure (i.e., water and electricity).

Actions Supported by this Operation

117. The Piauí DPL assists the GoP in promoting productive inclusion through the statewide mainstreaming of an updated PCPR model into a government-run program. As prior actions, Complementary Law 162 of December 30, 2010 was approved by the State Legislative Assembly creating the Directorate of Rural Poverty Alleviation under the Secretariat of Rural Development (*Secretaria do Desenvolvimento Rural, SDR*); and Decree No. 14,626 of October 31, 2011 was enacted by the State Governor, creating the “State Program for the Elimination of Rural Poverty” (PROGERE) and the organizational structure to manage it. The aim of PROGERE is to promote investments aimed at generating employment and income in family farming through the design and implementation of up to 800 project interventions in the areas of water supply, agribusiness and environmental protection. A particular emphasis of PROGERE will be on improving the active involvement and participation of women in economically and environmentally sustainable rural production chains. Over the 2012–2015 period, the GoP will target roughly 30,000 families through PROGERE in rural Piauí.

118. The desired outcome targeted by this DPL's support for the implementation of PROGERE is to have PROGERE operating in 112 municipalities.

Subcomponent A3: Ensure Environmental Sustainability

119. Rapid expansion of commercial agriculture and agribusiness in Piauí over the last decade has increased the challenges of sustainable agricultural growth. The principal concern is with the rapid occupation of the southwestern Cerrado (savanna) lands by private commercial-crop agriculture and its social and environmental impact. The GoP has defined a core area of 25 of Piauí's 224 municipalities,²² covering 69,800 km² or 28 percent of the state area, where such agricultural development is likely to be concentrated. Large-scale mechanized and partly irrigated soybean cultivation in the Cerrado region implies suppression of native vegetation (forest and bush clearing) with impacts on biodiversity, quality and quantity of surface and groundwater, and other ecological functions of native vegetation cover. It also has social dimensions because it affects the lives and economy of smallholders living in the valleys between the plateaus where mechanized soybean farming is being established.

120. Environmental challenges affect all rural areas of the state. They include the proper use and management of rural landscapes (zoning); use of natural resources; conservation of biodiversity; adequate water supply, both in quantity and quality, to human animal populations in a sustainable manner, particularly in the semi-arid eastern regions of the state; and responsible management of existing water resources. Rural economic activities such as firewood collection, charcoal production, brick kilns, and the use pesticides and fertilizers in modern agriculture have further environmental impacts, which require limitation and control by the Government.

121. The GoP has recognized the magnitude of these challenges. It has created and added to the legislative framework for environmental management and has begun to build up its capacity to address the challenges. State legislation, together with federal laws, is comprehensive and adequate to allow control of economic activities and mitigation of their impact on the environment. The challenge for the GoP is the effective application and enforcement of such laws. The following specific State policies and programs are briefly mentioned below and described in more detail in Annex VII.

122. Rural Environmental Registration and Licensing. The Brazilian Forest Code (Law No. 4,771 of 1965), which is currently being revised by the National Congress, requires private landholders to set aside a certain portion of rural holdings as "legal reserve," i.e., to keep it under its natural vegetation cover (whether forest or otherwise), and to leave the natural vegetation intact in "permanent preservation areas" (PPA), such as gallery forests, steep slopes, mountain tops, and land around natural springs. Legal reserve is generally set at 20 percent of each holding in Brazil, but at 80 percent in the "Legal Amazon," and 35 percent of Cerrado lands in the Legal Amazon. In Piauí, Law No. 5,699 of 2007 increased the legal reserve to 30 percent for the state's Cerrado region.²³ Landholders that are not in compliance with the Forest Code are required to restore vegetation where it has been cleared illegally.

123. Deforestation is not by itself illegal, but must be within legal limits and must be authorized by the State's Secretariat for Environment and Water Resources (SEMAR). SEMAR has been issuing authorizations for deforestation since 2008²⁴. Such authorizations

²² Twenty-five Cerrado municipalities are legally defined in State Law 5.699 of 2010. The overall area of the Cerrado biome in the state is 93,424 km², or 37% of the state's territory.

²³ Law 5.966 of 2010 defined a list of 25 Cerrado municipalities for the purpose of land regularization. The same list is being used in this report for other purposes.

²⁴ Before 2008, this was the responsibility of the federal environment agency IBAMA.

amounted to about 5,000 km² in the entire state, one half which in the 25 Cerrado municipalities. Suppression of native vegetation in these municipalities in 2009 and 2010 was 941 km², or about 1.4 percent of the territory,²⁵ whereas SEMAR had authorized 1,188 km² in 2009 and 839 km² in 2010. Actual deforestation thus appears to have been within the authorized limits.

124. Furthermore, any productive use of rural land requires a license²⁶ from government. As there were about 221,000 operational holdings in Piauí (as of 2006), most of which would require at least one license for an economic activity such as ranching or production of grains or cash crops, this is an enormous task for government. Since 2009, SEMAR has issued 1,145 rural licenses. The GoP is aware that the magnitude of the task requires substantial expansion of its institutional capacity. It has contracted civil servants with enforcement power through two official selection processes (*concurros*), bringing the effective force to 235 public servants, and will select an additional 30 in 2012²⁷.

125. The Rural Environmental Cadastre (CAR) is the main mechanism for government to enforce the law and to issue and monitor licenses. The CAR informs the boundaries of a property the location of legal reserve and the permanent preservation areas, and the owner. Federal Decree No. 7,029 of 2009 established the Program to Support the Environmental Regularization of Private Rural Holdings. The program introduced the CAR, defined as an electronic georeferencing system for identifying rural properties or occupied private landholdings, which delimits permanent preservation areas, legal reserve areas, and remaining areas of native vegetation in the holdings for control and monitoring purposes. The Decree requires that landholders “regularize” their holdings environmentally (bring them into compliance) by removing “environmental liabilities” (violations of law).

126. Registration in CAR is a precondition for obtaining an environmental license for rural economic activity on the land, and for other authorizations and official purposes within a state’s environmental administration. Proper registration and subsequent implementation of the rehabilitation plan causes any sanctions for violations of environmental law to be suspended and the holdings to be considered “regularized” (in compliance).²⁸ Failure to register and to carry out the commitment and rehabilitation plan will result in the application of the notifications, fines and punishments of law enforcement. On the other hand, CAR does not replace the need to register land with the National Cadastre of Rural Properties, does not constitute regularization of tenure, and does not represent an environmental license for any economic activities of the land.

Actions Supported by this Operation

127. The Piauí DPL assists the GoP in promoting the sustainable use of rural landscapes through the adoption of environmental monitoring and enforcement. As prior action, a Law No 6,132 of November 28, 2011 was approved by the State Legislative Assembly, creating the Program for Environmental Regularization of Rural Properties for the State of Piauí. Registration of a holding in the CAR occurs at the initiative of the landholder. This

²⁵ MMA: Monitoramento do Desmatamento nos Biomas Brasileiros por Satélite, Monitoramento do Bioma Cerrado 2009–2010, Agosto 2011

²⁶ There are actually three licenses required for each activity: a preliminary license, an installation license and an operating license.

²⁷ The process to select 6 of the 30 will occur still in 2011.

²⁸ This applies only to holdings where land clearing occurred before December 10, 2009, the date of the publication of the federal “Mais Ambiente” decree.

State Law stipulates a three-year period for landholders to do so. The landholder must inform: s (i) the exact georeferenced boundaries of the holding, the location of remaining native plant cover, the location of the legal reserve, and the actual location of permanent preservation areas; and (ii) his/her adhesion and commitment to keep his or her land in compliance with environmental and forest law or to take actions to bring it into compliance (environmental regularization), as the case may be. To this effect, the landholder signs Terms of Commitment and Adherence (*Termo de Compromisso e Adesão*, TCA) and submits, where applicable, a Plan for Rehabilitation of Degraded Areas (*Plano de Recuperação de Área Degradada*, PRAD). The landholder is generally responsible for the cost of georeferenced maps and preparation of a PRAD. The State simplified requirements apply to smallholders (with holdings of less than 100 hectares) for whom SEMAR or another authorized agency provides the georeferenced drawings at no cost.

128. SEMAR examines the proposed location of the legal reserve under several aspects (social function of the property, zoning requirements, proximity to other legal reserves, basin water management plans, municipal zoning plans, etc.) and the permanent preservation areas identified, and reserves the right not to approve them. Approval allows the owner to declare the location the legal reserve in the public notary office (*cartório*). Land reform settlements may declare the legal reserve for each individual lot or for the entire settlement as a single group. The latter option is the one preferred in the law.

129. Law No 6,127 of November 21, 2011 regarding the regularization of agricultural land occupation in the state (sub-objective A1.1) also reinforces the application of this Environmental Regularization Law. It stipulates that in order to receive or purchase the land, the occupant must present the registration in CAR.

130. The desired outcome of this DPL's support for the implementation of CAR is to reach 130,000 hectares of land in the CAR in the Cerrado region by mid-2013.

Component B: Improve Access and Quality of Basic Education

131. **Objectives:** The GoP's objective is to promote inclusive growth through improved statewide public education and a strengthened role for youth in the labor market through the design and implementation of an integrated set of policy reforms aimed at: (i) increasing access to quality basic education, (ii) improving management and learning outcomes in public schools, and (iii) strengthening the participation of vulnerable youth in public policies and programs.

Subcomponent B1. Improve Access to Basic Education

132. **Although access to fundamental education²⁹ has improved, there is still a need to provide education opportunities to the most vulnerable and low-income groups, mainly those living in rural areas.** The situation is most severe in secondary education. One of the main challenges in providing secondary education in rural or small urban areas is the lack of qualified teachers in different subjects such as chemistry, biology, physics, history, Portuguese and mathematics. Often, a single teacher has to deliver the entire program for three or four subjects, and this has a clear impact on quality of education. Over the past 10 years, several states, such as Amazonas, Pernambuco, Ceará and Acre, have developed systems to broadcast

²⁹ In the nine years of basic education.

live classes to secondary schools in rural or small urban centers. These systems use television and other technological devices. These programs have increased access to secondary education as well as improved the quality of this level of education as reflected in the IDEB results. Apart from the improved content knowledge; this approach enables digital inclusion of the students because they can use the system after school hours for research, etc. In the Piauí distance learning model the students will interact with the distance teachers and will be supported by local teachers who will be trained and integrated in the overall program.

Actions Supported by this Operation

133. The Piauí DPL assists the GoP in promoting equal access to integrated secondary education. As prior action, Decree No. 14,628 of October 31, 2011 was enacted by the State Governor, establishing the Piauí Digital Program and introducing educational multimedia tools in schools. To increase the availability of academic and technical-vocational secondary education, mainly in small municipalities and remote areas, the Piauí Digital Program is aimed at establishing a digital link among the municipalities. The broadband link will be available for free in public buildings and areas. The first phase is intended to link 43 municipalities. The Piauí Digital Program will support the provision of distance-learning strategies in school settings for improving enrollment in secondary education, including the provision of technical-vocational courses for students in municipalities connected to the system. Approximately 40,000 new vacancies will be offered to new secondary students.

134. The desired outcome targeted by this DPL's support for the promotion of equal access to integrated secondary education is to increase by 20 percent the number of enrollments in secondary education through the use of the Piauí Digital Program and other technologies.

Subcomponent B2. Improve Management and Learning Outcomes of Public Schools

Subcomponent B2.1 Improve Efficiency of Basic Education in the State

135. Age-grade distortion is high in Piauí. Keeping students two or three years in the same grade has a serious impact on children's self-esteem as well as on financing education. With low motivation to continue in the same grade for two or three years, students drop out of school before finishing their specific level of schooling. Age-grade distortion is frequently a result of the culture of repetition. The culture of repetition creates significant problems for improvements in the efficiency of basic education in the state and is a burden on the adequate use of educational resources.

Actions Supported by this Operation

136. The Piauí DPL assists the GoP in improving the efficiency of the education system through the use of methodologies for decreasing the age-grade distortion and repetition and dropout rates. As prior action, Decree No. 14,627 of October 31, 2011 was enacted by the State Governor, defining the Accelerated Learning Program for fundamental education grades 1 to 4. The program will be implemented in selected state public schools, including the provision of teacher training programs.

137. The desired outcome of this DPL's support for improving the efficiency of the education system is to decrease the percentage of children who are more than two years

behind grade level in grades 1 to 4 in state public schools, by at least 1 percentage point annually, from 38.1 in 2010 to 36 by mid-2013.

Subcomponent B2.2 Strengthen School Management and Learning Outcomes for Public Schools

138. **The GoP firmly believes that a more professional and participatory approach is needed in school management.** In the past, school principals and school system regional managers were political appointees with little experience in school management and in management of the education system. To change this situation, the GoP created a system to select school principals and school system regional managers based on merit and participation. State Monitoring and Evaluation systems will also be established to monitor the schools, to assess student's performance, and to support the implementation of the quality improvement policies adopted by the Government.

Actions Supported by this Operation

139. **The Piauí DPL assists the GoP to promote the strengthening of school management and learning outcomes for public schools. As prior actions, Decree No. 14,385 of January 13, 2011, creating a formal process for selection of regional managers and Decree No. 14,607 of October 14, 2011, for selecting school principals were enacted by the State Governor.** Decree No. 14,385 defines a merit-based selection process. Each regional manager candidate must present a work plan for the next three years including activities and targets. A professional selection committee reviews the applications and conducts the interviews. Teachers need to meet a set of criteria to apply for the position. Meanwhile as defined by Decree No. 14,607, school principals are elected by the school community, represented by teachers, students and parents in a participatory process that increases the interaction between the school and the communities.

140. **The desired outcomes of this DPL's support for strengthening of school management are to select all the regional managers through the new selection process, and select at least 80 percent of school principals according to Decree No. 14,607³⁰.**

Subcomponent B3. Strengthen the Participation of Vulnerable Youth in Public Policies and Programs

141. In addition to educational policies for increasing the social and economic inclusion of youth, **the Government has launched a series of mechanisms and measures to enhance the youth's participation in the discussion, design and implementation of programs developed by the various levels of government.** The challenge has been to coordinate those mechanisms and measures and ensure the synergies and complementarities among them.

Actions Supported by this Operation

142. **The Piauí DPL assists the GoP in promoting the participation of vulnerable youth in public policies and programs. As prior action, Complementary Law No. 162 of December 30, 2010, was enacted by the State Governor, creating the State Coordination Agency for**

³⁰ This includes the 484 schools, which have more than 200 students, plus the secondary and technical-vocational schools.

Youth³¹. This agency is responsible for the implementation of the State Plan for Youth Empowerment (Law No. 5,093 of 2009), which is the direct result of the First State Youth Conference held in 2009. This plan establishes a set of targets and programs for a 10-year period, which are evaluated every three years when a new State Conference is held.

143. The desired outcome of the DPL's support for vulnerable youth is to increase by 50 percent the number of Municipal Youth Councils created by legal documentation from 8 Municipal Councils in 2010.

Component C: Increase the Efficiency of State Public Management

144. **Objectives:** The GoP objective is to promote fiscal sustainability through increased efficiency in public expenditure management through the introduction of results-based management tools, procurement systems and the monitoring and evaluation (M&E) of public projects.

145. **The Government of Piauí has launched a comprehensive reform program to improve its effectiveness and efficiency in the provision of public services.** Recognizing the changing and growing demand for quality and lower cost of public sector services, the State of Piauí is progressively shifting to a results-oriented focus. To this end, in 2011 the state adopted mechanisms based on public sector management experiences in other states, especially Ceará and Pernambuco. The different State Secretariats have been clustered in areas according to their potential synergies. There are six such areas: (i) social dimension I³², (ii) social dimension II³³, (iii) law enforcement and justice, (iv) infrastructure and environment, (v) economic development and public companies, and (vi) institutional dimension. Each area meets with the Governor at least once a month. At these meetings, each secretariat or agency presents the progress toward the agreed targets, as well as challenges and demands that can be met by the other participating agencies.

146. **The role to be played by the Secretariat of Planning (*Secretaria do Planejamento, SEPLAN*) is central under a results-based management system and requires permanent staff.** The creation of a planning and management career in SEPLAN and the ensuing public process (*concurso*) are key for the long-term institutionalization of the results-based management system in the state.

147. **The State General Auditing Agency (*Controladoria Geral do Estado, CGE*) plays the unique role of monitoring and auditing procurement processes and ex post analyses of state public expenditure.** The hiring of at least 10 new auditors over the next 12 months will significantly upgrade CGE's capacity to carry out its functions in the environment of increased public investment likely to be proposed by the Strategic Multi-Year Plan 2012–2015.

³¹ The State Coordination Agency for Youth has been very proactive in coordinating with the different agencies in the state dealing with youth issues and programs. Currently, it has established a partnership with the Secretariat of Education to implement Youth Centers (*Centros da Juventude*), which offer additional support for vulnerable students to practice sports and cultural activities, remedial learning activities and technical-professional training programs. The Youth Centers are being rehabilitated in Teresina and other key municipalities where poverty and violence are very high. Another strong partnership developed by the State Coordination Agency for Youth is with Brazilian Service in Support of Micro and Small Enterprises (Serviço Brasileiro de Apoio a Micro e Pequenas Empresas-SEBRAE) and other agencies to support the students who have completed the Projovem, the Plantec and Planecec programs, which deal with rural and urban youth and help them become entrepreneurs.

³² It is comprised of Programs related to basic education, higher education, culture and sports.

³³ It is comprised of Programs linked to health, social assistance and inclusion.

Actions Supported by this Operation

148. **The Piauí DPL assists the GoP in promoting state public management efficiency. As prior action Decree No. 14,637 of November 22, 2011 was enacted by the State Governor, creating the Government Results Based and Financial Management Steering Committee to monitor a portfolio of priority projects linked to the Strategic Multi-Year Plan 2012–2015.** The Decree is essential to improve and institutionalize the management process outlined above. The Steering Committee is the natural evolution of the current Financial Management Committee, but it is empowered by the specific roles and responsibilities to develop and implement a results-based management system as defined in the Decree. These are key measures as the GoP is concluding the participatory planning of its Strategic Multi-Year Plan 2012–2015.

149. **The desired outcome of this DPL’s support for promoting state public management efficiency is to have 60 percent of state projects or programs included in the results-based management system.**

VI. Operation Implementation

A. Poverty and Social Impacts

150. **Overall, the specific policy reforms supported by this development policy loan are expected to have significant and positive poverty alleviation and social development impacts in the State of Piauí because they address key constraints to human development, economic growth and public governance and transparency.** These policies and reforms address key issues and needs related to low educational indicators, inequality of land distribution of titled land, and protection of environmentally fragile areas. Because poverty rates in Piauí are strongly related to illiteracy, lower school education, rural settings and land deprivation, the policies for promoting green and inclusive growth in rural areas, and improving access to and quality of education are expected to bring the highest benefits to the poor and extremely poor population living mostly in rural areas, traditional communities, and informal and precarious urban settlements. These social groups lack the basic abilities needed to take advantage of accelerated economic growth and job opportunities in the state.

151. **During the project preparation phase, the Bank undertook a poverty and social impact analysis to explore the disaggregated social impacts on different stakeholder groups.** It is based on primary and secondary sources: social and economic analyses utilizing demographic and census data, ethnographic studies, focus group meetings and individual interviews with key stakeholders. The analysis focused on the policies for promoting green growth in rural areas, and improving access and quality of education supported by the operation. Consultations with key stakeholders were held on: (a) the adequacy of the policy reforms proposed to the most relevant questions for the promotion of sustainable development, social inclusion and poverty reduction; (b) the positive and negative impacts they could have on different social groups and particularly on the poorest and most vulnerable; (c) the main challenges and risks to the introduction of these policies from the perspective of these stakeholders; and (d) the degree of support as well as of resistance they might receive. From August 8 to 11, 2011, eleven focus group meetings and interviews were carried out in Teresina (the state capital) and in three municipalities of the Cerrado: Santa Filomena, Bom Jesus, and Redenção do Gurguéia. About 150 people were heard during these consultations; they included representatives of Cerrado soybean producers, family farmers, and rural workers’ unions;

quilombola communities and statewide *quilombola* organizations; principals, teachers and students of state schools; municipal authorities and staff of state and federal agencies (INTERPI, ADAPI, EMATER, SEMAR, INCRA, and IBAMA).

152. Policies for the promotion of green, inclusive growth in rural areas are expected to bring positive social and economic gains to poor people and the most vulnerable social groups. Key stakeholder interviews and focus group meetings have stressed the cause–effect relationship between socially and environmentally sustainable rural development and policy reforms based on the integration of (i) land regularization reforms targeted to small- and medium-size landowners and traditional communities, (ii) productive inclusion programs, and (iii) environmental protection policies as proposed by this operation. The combination of these complementary reforms is expected to bring positive social, economic and environmental impacts for poor rural families in Piauí and particularly on the new agricultural frontier represented by the Cerrado. It is expected that the land regularization policy reform together with the CAR policy will positively contribute to stop irregular land grabbing in fragile ecosystems and secure land tenure rights of legitimate squatters.³⁴ It will likely also contribute to reduce land conflicts between large commodity producers and small family farmers and to overcome violence and social instability in rural areas.³⁵

153. The land regularization policy supported by this operation provides full land tenure titles through the donation of land to small farmers. This measure will contribute to reduce poverty among small family farmers and, particularly, among groups who are traditionally discriminated against because secure land rights affect economic growth and poverty reduction through a number of channels. As widely evidenced, for most of the rural poor people having access to secure land rights over even small plots of land may bring positive impacts because land: (a) is their primary means for growing crops that can greatly improve food security and quality, for reducing vulnerability to hunger, and for generating a livelihood; (b) constitutes their main vehicle for investing, accumulating wealth, and transferring it between generations; and, (c) provides to them a basic social safety net at a cost that is much below alternative government programs, which ensures their basic subsistence and may allow them “to take on greater risks in non-agricultural businesses and, with policies to foster lease markets for land, contributed significantly to the emergence of a vibrant non-farm economy”.³⁶ From these worldwide evidences, secure land rights are expected to influence the extent to which farmers are prepared to: (i) invest their full effort in their land, (ii) adopt new technologies and promising innovations, (iii) make long-term improvements attached to the land, and (iv) rent out their land

³⁴ Data from INTERPI, the state agency responsible for land regularization: 1,025 landholders (89% medium landholders and 11% small landholders) had applied to regularize their land plots in the period from January 2010 to June 2011.

³⁵ There is little disagreement that if property rights are poorly defined or cannot be enforced at low cost, individuals and entrepreneurs will be compelled to spend valuable resources on defending their land, thereby diverting effort from other purposes such as investment” (Deininger: 2003). In the interviews held to collect primary data for the poverty and social impact analysis, key stakeholders argued that, in the Cerrado, a major potential source of conflicts between large commodity producers in the highlands and small family farmers in the lowlands is the former’s need to comply with the environmental legislation related to the portion of each property that must be kept under natural vegetation. As the cropping area in the highlands is expanded to the maximum limits, large producers of commodities may want to access less profitable and cheaper lowlands to comply with the Forest Code, which would place pressure on and expel their traditional inhabitants. Another major reason for conflicts between them that is often pointed out by traditional inhabitants of the lowlands relates to the restriction on their access to the highlands customarily used for hunting, gathering and extensive cattle raising.

³⁶ This assertion holds true even when policies give secure property rights only to land the poor and small farmers already possess, because, unlike the rich, they “are not able to afford the (official and unofficial) fees needed to deal with the formal system.” (Deininger: 2003)

at low cost for those others who may be able to make better use of it. By stipulating that the land titles must be issued in the name of both spouses, the land regularization policy supported by this operation may also contribute to reduce gender inequalities which, in rural areas, are world widely related to the neglect of women's land rights.³⁷ Finally, the land regularization policy supported by this operation will be coupled with sustainable rural development policies that will provide technical assistance, promote new economic activities, and foster technological innovation and access to market.

154. Combined with policies of productive inclusion and environmental registry of rural properties, secure land tenure rights will likely contribute to reduce poverty insofar as the access to credit and financing lines as well as to technical assistance by small and medium landholders will increase.³⁸ As previously mentioned, in the last three decades INTERPI has conferred more than 9,000 Concessions for the Real Right of Use and the passage of Law 6,127 of November 21, 2011 has created a pathway to convert these concessions into full land tenure titles. Since “concessions” – unlike titles – are generally not accepted as the basis for loans and investment credit (such as Common PRONAF), it is expected that this land regularization policy would potentially have a significant impact on expanding the penetration of farm credit, contributing to provide small farmers with appropriate extension services, to foster technological innovation, and to increase productivity, income and well-being. Thus, it is expected that the land regularization policy supported by this operation will benefit, in the short run, at least 2,000 small and medium farmers in the State of Piauí (a 100 percent increase in the number of applications for rural land tenure regularization submitted to INTERPI). Additionally, it is expected that at least 200 small and medium farmers in newly regularized land plots will take advantage of new opportunities of access to credit (i.e., a 15 percent increase in the number of eligible Common PRONAF).

155. Consequently, agricultural producers of subsistence crops and commodities will be better able promote technological improvements in their productive systems, achieve gains in productivity, and secure higher yields and earnings. In this way, poor families can benefit from positive impacts on food security and family well-being, access to the market economy, and higher monetary earnings. It is also expected that potential income growth and new job opportunities in more productive small- and medium-size farms will also contribute to retain more people in rural areas, reducing demographic pressures, housing deficits, and social issues that characterize life in precarious settlements in poor urban peripheries, thereby sharing the benefits of sustainable rural development to urban areas. Finally, higher yields and agricultural surplus combined with improved access to markets may also positively impact the state's tax revenues.

156. Because land regularization and productive inclusion policy reforms directly address the issues of secure land tenure for *quilombola* communities and prioritize the participation of these communities, it is expected that they will have positive impacts on reducing

³⁷ “Control of land is particularly important for women, whose asset ownership has been shown to affect spending, for instance, on girls' education. Yet traditionally, women were disadvantaged in terms of land access. Ensuring that they are able to have secure rights to one of the households' main assets will be critical in many respects, including challenges arising in the context of the HIV/AIDS epidemic where absence of secure land tenure for women who have lost their husband has been shown to be a key reason for costly conflict and additional hardship to be suffered by widows.” (Deininger: 2003)

³⁸ In 2006, only 18.3% of the state's family farmers have accessed credit institutions and obtained financing. Family farmers' access to technical assistance has consistently been low as well. Source: IBGE, *Censo Agropecuário 2006*, available at http://www.ibge.gov.br/home/estatistica/economia/agropecuaria/censoagro/brasil_2006/default.shtm.

extreme poverty in Piauí. Combined, these policies may be able to answer the key constraints faced by nearly 200 traditional Afro-descendent communities in their livelihoods. These communities comprise more than 10,000 families and traditionally occupy an area of approximately 670,000 hectares. These families depend on natural resources for their livelihoods, rely on land-use practices that are considered to have comparatively little negative impact on natural resources, and are among the state's most deprived populations; they are overrepresented among the extremely poor.³⁹

157. The Program of Regularization of *Quilombola* Lands prioritizes *quilombola* communities certified by the Palmares Foundation and/or INTERPI which occupy vacant state areas. It was created by State Decree 14,625/2011 and regulates State Law 5,595/2006. The program is guided by a highly participatory process that requires prior, informed and culturally adequate consultations leading to broad support and consent by the community population as well as the participation of representatives of *quilombola* communities in all stages of the land regularization and titling process. It also ensures the rights of the owners of lands claimed by *quilombola* communities are properly respected and compensated. Thus, landowners at the claimed area have 90 days after notification to contest the *quilombola* claims and the works for land titling only start after *quilombola* land claims can no longer be challenged. In consequence, this land regularization policy can potentially prevent the use of fraud and intimidation to size these lands, avoid the usurpation of *quilombola* customary land rights, and protect the legitimate land claims and titles of owners of landholders in areas claimed by *quilombola* communities. Finally, it is expected that the regularization of *quilombola* lands will benefit, in the short run, at least 40 communities that have filed requests for regularization.⁴⁰

158. Finally, policy reforms that combine land regularization, productive inclusion and affirmative action to promote the sustainable use of rural landscapes may contribute to reduce the burden of poverty by contributing to overcome the environmental constraints that worsen the life of poor people. Secure land tenure and environmental awareness are key factors that enhance the sense of ownership, the feeling of belonging to a community, and the affective ties to a rural landscape. These ingredients contribute to build the social cohesion needed for effective management of common resources. In the new agricultural frontier of the Cerrado, these combined reforms may lessen conflicts between the highlands' commodity producers and the lowlands' family farmers; these conflicts are largely related to compliance with the legislation on "private protected areas." These combined policy reforms may encourage landowners to introduce new and more environmentally sound technologies in their productive systems and to reduce their environmental footprint and its most common adverse effects: soil degradation and erosion, silting of water courses and contamination of springs.⁴¹ Furthermore, because many of the streams that supply drinking water for the state's urban population—

³⁹ According to INTERPI/INCRA, in the State of Piauí, only five *quilombola* lands have been fully regularized. They comprise 539 families who retain an area of 20,500 hectares. The state agencies have begun the processes of land regularization of 15 *quilombola* communities.

⁴⁰ As previously mentioned in paragraphs 112-115.

⁴¹ Representatives of highland commodity producers and lowland family farmers reproach each other for this environmental footprint. The former argue that they are more frequently targeted by state inspections and have more access to knowledge, technologies, resources and technical assistance to introduce new productive methodologies to support their view that they are the main promoters of conservation practices in the region. They accuse small family farmers of being the main threat to the biome because they are settled in the most fragile lowlands, rely on more rudimentary productive systems (slash-and-burn agriculture), and lack knowledge and resources to promote soil conservation. In contrast, representatives of the latter pointed out intensive land use and deforestation as well as excessive use of pesticides in the highlands as the main factors for environmental degradation, erosion, silting of water courses, and contamination of springs.

including the state capital—have their headwaters in the Cerrado, the promotion of environmentally sustainable development in this region is expected to bring positive impacts for the health and well-being of the state population in general.

159. Key stakeholders have emphasized two main constraints to achieve these expected results, which refer to the low institutional capacity of state agencies and the strong influence of vested local interests in policy making that leads to elite capture of policy benefits. The institutional capacity of INTERPI (the state agency responsible for land regularization) to efficiently address the demands for land and environmental regularization has been generally rated low. Representatives of the most vulnerable social groups have criticized: (a) the slowness of land regularization procedures and a perceived bias in favor of large commodity producers in land regularization processes that involve conflictive claims with small family farmers and traditional communities; (b) the control of municipal councils—established to work as participatory decision-making and social control authorities for productive inclusion policies—by municipal authorities and local elites; and (c) the failure of these policies to reach the remote and deprived *quilombola* communities.⁴² In their view, because the economically better-off groups hold more power to influence state decisions than the most vulnerable social groups, there is a risk that the former might be favored by land regularization and productive inclusion policies to the detriment of the latter.

160. The state has provisionally addressed the concerns related to INTERPI’s institutional challenges to promote land regularization by signing agreements with INCRA (the federal agency in charge of land regularization) and by hiring consultants to carry on these activities. As previously mentioned, the number of claimants under Law 5,966/2010 (1,121 small and medium farmers) is about 7 percent of the total number of properties historically regularized by INTERPI. Thus, given the major advances in surveying and georeferencing technologies in recent years, it is reasonable to expect that INTERPI, with some capacity strengthening and business-process reengineering, can increase its productivity going forward and answer to the expected demand of the nearly 2,000 small and medium farmers that will apply in the short run for land regularization under Law 6,127/2011.

161. The policies supported by this operation will address the concerns related to reaching and effectively giving voice to the most deprived populations, the precarious representation of vulnerable groups in policy decision-making authorities and potential elite capture of policy benefits, insofar as (a) the land regularization policy will prioritize *quilombola* communities and (b) the decree that set up the new program of productive inclusion states that proposals presented by women’s groups, *quilombola* communities and other traditional communities will receive top priority for funding.

162. Education and youth policies supported by the operation will ease many of the constraints faced by lower-income youths in poor rural and urban areas by breaking the vicious cycle of poverty and extreme poverty that it is causally related to poor education and low professional qualification. The state’s public education system faces many challenges

⁴² Meanwhile, they have also emphasized the strong participation of women in community associations and municipal councils as a positive outcome of the productive inclusion policies supported by this operation. Municipal councils have been described as generally well structured, committed to their responsibilities and to run open, lively, participatory meetings on a regular basis, establishing a channel for representation of traditionally excluded poor rural communities. However, it has also been expressed that dependence on municipal authorities for basic operating support has reduced their autonomy and eroded their community motivation and support.

and obstacles. Historical data show high dropout and repetition rates and age-grade distortion, as well as poor performance in national tests for assessing the quality of education. In fundamental education, approval rates have increased, and repetition and dropout rates have dropped; in secondary schools, the opposite trends prevail and the high dropout rate is the main challenge to be faced. The age-grade distortion rate remains high in both fundamental (33 percent) and secondary schools (52 percent). Finally, despite some improvements, the state fares poorly in national assessments of teaching quality at both levels.⁴³

163. As confirmed by stakeholder interviews, the underlying causes of poor learning outcomes, high repetition and dropout rates, and age-grade distortion rates are both endogenous and exogenous to the state's education system. The endogenous causes include: insufficient coverage of basic education, mainly at the secondary level; the scarcity of teachers for different subjects in rural areas and the frequent absences of teachers in evening classes at schools located in the poorest and most violent urban neighborhoods; unattractive curriculum, inadequate teaching materials, precarious school facilities, and inefficient school management; political interference in the selection processes for teachers, principals and staff of state schools to the detriment of merit and quality. The exogenous causes are mostly related to the most vulnerable youths and refer to: their need to enter the labor market early; their perception that school is not relevant to them and their lack of motivation for staying in school; the weak social networks they build with school peers; the weak and distant ties with teachers and school staff members; and their perception of school mostly as an unfriendly environment.

164. By addressing the key challenges of improving school management and decreasing illiteracy, repetition and dropout rates, the policies supported by this operation are expected to overcome the main constraints confronted by the faulty state educational system. The selection and evaluation of teachers, principals and other school staff by merit have been positively evaluated by all stakeholders. The positive impacts expected from this policy reform refer to the minimization of political interference in school life, which is viewed as the main reason for poor staff selection and consequently for low teaching quality. As observed among teachers and school administrators, selection by merit brings positive attitudinal changes (self-assurance, accountability, satisfaction, etc.), reinforces their identification with the school community, and promotes more proactive behavior with positive outcomes for teaching quality. Policy reforms that have positive impacts on school outcomes are also expected to promote social and economic inclusion, and to stop the perverse cycle of intergenerational poverty reproduction. Among poor youths, the proposed educational policies can potentially and positively contribute to human, economic and social capital building. These youths may benefit from improved self-esteem, strong civil awareness and stronger participation in society and in policy decision-making processes. They may also be encouraged to exercise their citizenship rights more proactively and be pushed to aim for more ambitious life plans. As they receive more adequate schooling and vocational training, it is expected that they will become capable of taking

⁴³ Despite some progress in recent years, the state's results in the national Basic Education Development Index (IDEB) are lower than national averages (-13% and -5% in the 4th and 8th grades of elementary school, and -17% in the 3rd year of secondary school). They are comparatively worse when only state schools are considered (-22% and -11% in the 4th and 8th grades of elementary school, and -21% in the 3rd year of secondary school). Sources: INEP, *Resultados do IDEB*, available at <http://ideb.inep.gov.br/resultado/>; Secretaria de Estado de Educação, *Relatório da SEDUC-PI 2003-2010* (Teresina: Dezembro 2010); and Fundação CEPRO, *Piauí em Números-8ª Edição* (Teresina: SEPLAN, 2009), available at www.cepro.pi.gov.br/download/201104/CEPRO06_aff9b5f5a6.pdf.

better advantage of the new and more sophisticated opportunities open in the labor market, obtaining better jobs and higher wages.

B. Environmental Aspects

165. Overall, the specific policy reforms supported by this development policy loan are expected to have significant and positive environmental impact because they promote environmental compliance in rural areas and sustainable agriculture. These are of great relevance to environmental quality and natural resource protection in the state because agriculture is expanding rapidly, especially in the southern section covered by the Cerrado.

166. The adoption of the Rural Environmental Registry (CAR) through a State Law draws upon the Bank's experience with similar initiatives in the Amazon. It will provide the framework to improve environmental governance, ensure compliance with the Forest Code, and prevent and combat illegal deforestation of the Cerrado.

167. Thus during preparation, the team worked with the state government to ensure that the new State land regularization Law 6,127/2001, supported by this DPL, includes a requirement for the farmers to enter in the CAR and thus follow the Forest Code, as well as to comply with other environmental regulations (e.g., licensing and water-use rights). This will prevent the proposed regularization of past land occupation from engendering or failing to redress past negative environmental effects, such as illegal deforestation, as buyers will know that they will be held accountable for their past or future lack of compliance with environmental law. Furthermore, the State land regularization law also includes an initial screening process to ensure that no High Conservation Value area identified by the State Environmental Agency (even if still unprotected) can be transferred to the private sector for agricultural use.

168. In addition, the State CAR law 6,132 /2011 supported by this DPL has a separate broader positive environmental impact as it applies to all private holdings (i.e. those already regularized). Besides promoting the enforcement of the Forest code, the CAR law requires landholders to prepare a plan for the restoration of all environmental liabilities (i.e., lands cleared beyond the limits set out by the Forest Code⁴⁴ or by existing State law which increase such limit in the Cerrado from 20 percent to 30 percent). The State CAR law has provisions to support implementation of such plans through technical assistance, supply of seedlings, among others. Those provisions not only provide positive incentive to the landholders but enable SEMAR to proactively ensure the environmental conservation value of the measures adopted in those plans. Furthermore, registration in CAR is a precondition for obtaining an environmental license for rural economic activity on the land, and for other authorizations and official purposes within a state's environmental administration.

169. The CAR law will also encourage operators to use the land in more environmentally sustainable ways in compliance with the Forest Code, which in turn will increase the penetration of their products in formal markets. This is likely to be so because possession of a property title and registration of the legal Reserve and Permanent Protection Areas were made a

⁴⁴ The 1965 Federal Forest Code establishes the limits of Permanent Protected Areas along margins of rivers based on their width. The Brazilian Congress has been discussing a revision of such limits for the case of rehabilitation of illegally deforested areas. Such changes won't change the limits set by Piauí State laws, as the Brazilian constitution allow for states to have more restrictive requirements than the equivalent Federal ones.

requirement for obtaining an Environmental License, proof of which is in turn required to formally market agricultural products.

C. Implementation, Monitoring and Evaluation

170. **The Secretariat of Planning of the State of Piauí (SEPLAN) will be responsible for coordinating the overall implementation of the proposed operation and for reporting progress and coordinating actions.** SEPLAN will be responsible for coordinating activities with the Secretariat of Finance, Secretariat of Environment and Water Resources, Secretariat of Education, Secretariat of Rural Development, and Land Administration Institute (INTERPI). In this regard, two tasks are essential: (i) providing evidence to meet the single-tranche conditions, and (ii) facilitating the timely completion of the studies and activities required for meeting these conditions.

171. **The Bank will verify the fulfillment of prior conditions for the single tranche.** The timing of the disbursement will depend upon the GoP's ability to provide the Bank with satisfactory evidence that the conditions have been met. Although all these conditions have already been addressed during project preparation, the Secretariat of Planning will have the responsibility of presenting the information in a timely manner and in a format satisfactory to the Bank.

172. **A Project Implementation Committee composed of officials from the agencies directly involved in the DPL-supported reform agenda will monitor implementation and outcomes, including all essential technical assistance activities.**

Table 5. Results framework analysis

Policy Area	Baseline (2010)	Outcome Indicators by June 2013	2012–2015 CPS Outcome
Component A. Promote Green Growth in Rural Areas			
Sub-component A1. Improve Land Tenure Administration			
Regularization of land tenure for small family farmers and larger producers with particular focus on the Cerrado	781 requests for land regularization through concession contracts of Real Right of Use in 2010 ^a 45 requests for land regularization of <i>quilombola</i> communities sent to INTERPI by December 2010 ^a	100% increase in the number of applications for rural land tenure regularization submitted to INTERPI 15% increase in the number of eligible Common PRONAF (excludes PRONAF A and B) credit applications received	Sustainable Natural Forest Management of private and public areas Testing new approaches for removing barriers for the socio-economic inclusion of extremely poor and vulnerable communities
Regularization of land tenure for <i>quilombola</i> communities	Number of applications received for PRONAF C in 2010: 1177 ^b		
Sub-component A2. Promote Sustainable Agriculture			
Increase in employment and income in family farming - Productive inclusion	Number of municipalities under PROGERE in 2010: ZERO	PROGERE operating in 112 municipalities	Help selected State Governments design and implement innovative sustainable rural development programs with a territorially integrated approach Increased sustainability of agricultural production in the Cerrado

Policy Area	Baseline (2010)	Outcome Indicators by June 2013	2012–2015 CPS Outcome
Sub-component A3. Ensure Environmental Sustainability			
Promotion of sustainable use of rural landscapes	Number of ha of land registered in the CAR in the Cerrado region in 2010: ZERO	130,000 ha of land in the CAR in the Cerrado region.	Strengthen and integrate the environmental management systems in rural areas, including through the implementation of Rural Environmental Registries
Component B: Improve Access to and Quality of Education			
Sub-component B1. Improve Access to Basic Education			
Increase in access to secondary education programs	In 2010, secondary education enrollment reached 144,803 ^c	30% increase in the number of enrollments in secondary education through the use of the Piauí Digital program and other technologies	
Sub-component B2. Improve Management and Learning Outcomes of Public Schools^d			
Improvement of quality of basic education in the state	In 2010, 38.1% of children are more than two years are behind grade level in grades 1 to 4 in the state's public schools	Decrease, by at least 1% annually from 38.1 in 2010 to 36 by June 2013, the percentage of children more than 2 years behind grade level in grades 1 to 4 in the state's public schools	Improve learning outcomes and completion rates in primary and secondary education as measured by, IDEB
Strengthen school management, and learning outcomes for public schools	The first selection for the GRE manager took place only in 2011 in 20 out of 21 GREs. The selection process should be held every two years. The last election for School Principals occurred in 2009 in 657 schools (81%) of the State Network. New elections will be held in early December 2011	Select all regional managers through the new selection process and at least 80% of school principals selected according to Decree 14,607	
Sub-component B3. Strengthen the Participation of Vulnerable Youth in Public Policies and Programs			
Promotion of policies for increased social and economic inclusion of youth	In 2010, 8 (eight) Municipal Youth Councils were created	50% increase in number of Municipal Youth Councils created by legal documentation, from 8 Municipal Councils in 2010	
Component C. Increase the State's Public Management Efficiency			
Strengthen of the institutional framework for efficient public service delivery	Number of projects or programs included in the results-based management system in 2010: ZERO	60% of state projects or programs included in the results-based management system	Increase result orientation in planning, budgeting and expenditures in Piauí

^aSource: INTERPI

^bSource: Banco do Nordeste

^cSource: MEC/INEP-2010

^dSource: SEDUC

D. Fiduciary Aspects

173. **A robust legal framework serves as the basis for Brazil's public financial management environment.** This framework provides for a clear definition of the responsibilities of federal and subnational entities. It was developed through the introduction of various legal and institutional reforms that were introduced over a number of years to help strengthen accountability and transparency in the management of public finances in Brazil. A public accountability law (Law No. 4,320 of 1964) regulates financial controls, budgeting and reporting at the federal, state and municipal levels. The Fiscal Responsibility Law (LRF) of 2000 established particular requirements for macroeconomic and fiscal discipline that define many aspects of the public financial management (PFM) environment.

174. **Institutional arrangements for the management of public finances are clearly established in the State of Piauí.** The State Secretariat of Planning (*Secretaria do Planejamento do Estado do Piauí*, SEPLAN) is responsible for planning and budget preparation; the State Secretariat of Finance (*Secretaria da Fazenda do Estado do Piauí*, SEFAZ) is responsible for managing treasury, accounting and reporting processes; and the State General Auditing Agency (*Controladoria Geral do Estado*, CGE) is responsible for internal auditing. In addition, the State Audit Court (*Tribunal de Contas do Estado do Piauí*, TCE) is responsible for external scrutiny, and the legislature plays an external oversight role. The legal framework provides for a strong PFM mandate at the subnational level. The existence of federal laws and regulations for specific PFM areas helps to promote uniform requirements in PFM practices across subnational entities.

175. **The budget classification system is governed by federal rules that are consistent with international standards.** These rules also establish specific requirements related to the inclusion of comprehensive information in the budget documents. The budget preparation process is orderly, and is designed in such a way as to promote participation by all key stakeholders and sector agencies. The process is guided by well-defined budget preparation procedures and a calendar that establishes the proper sequencing of activities to allow sufficient time for them to be undertaken. This has been recognized through the high score Brazil obtained in the 2010 Open Budget Index, indicating that significant information is provided to the public in budget documents. See <http://www.internationalbudget.org/files/OBI2010-Brazil.pdf>.

176. **Accounting rules and regulations are respected and there is a high level of transparency with respect to financial information on the state's transactions.** This is due to a number of factors, including the clarity with which relevant laws describe obligations in relation to the preparation of these financial statements, and the diligence with which they are applied. The state has consistently met deadlines for the preparation of key budget documents and for submitting them to the legislature for consideration and approval. These documents include the Multi-Year Plan (PPA), the Budget Guidelines Law (*Lei de Diretrizes Orçamentárias*, LDO), and the Annual Budget Law (*Lei Orçamentária Anual*, LOA).

177. **Despite this fairly robust multi-year planning framework, there are some inconsistencies between the program objectives, costs and targets listed in the PPA and those reflected in the work plans of budget agencies and the execution reports prepared by them.** This weakens the linkage between multi-year planning and the annual budgeting process. The Government is committed to improving the medium-term outlook in its planning and budgeting process, including better coordination between planning agencies and the sector; financial units in individual secretariats would address these weaknesses. In this regard, the Piauí

DPL supports the GoP in addressing this issue through the enactment of Decree No. 14,637 of November 22, 2011, which created a results-based management system and a Government Results-Based and Financial Management Steering Committee to monitor a portfolio of priority projects linked to the Strategic Multi-Year Plan 2012–2015.

178. The state’s information system, SIAFEM-PI, is adequate for most purposes. SIAFEM-PI enables the identification of all resources transferred from the treasury to the service delivery units, and also provides information on the transfer of goods procured and distributed centrally. However, the system uses an outdated architecture upon which it was based and which limits its usefulness as a management tool.

179. The financial programming process is working well. SEFAZ is responsible for formulating cash flow forecasts, as well as updating them and monitoring their implementation. To increase the predictability of budget execution and improve the relationship between planned activities and the availability of financing, the Government embarked on a series of reforms to strengthen annual financial programming processes. It also introduced measures to require that suppliers be paid in a timely manner. The use of a single treasury account model of cash management and a clear allocation of responsibility for managing it facilitate the performance of bank reconciliations on a regular basis and in a timely manner.

180. The internal audit agency, CGE, reports directly to the Governor’s Office and is responsible for providing assurance to management about the functioning of the internal control system. The CGE is also responsible for the Piauı State Transparency Portal (*Portal da Transparência do Estado do Piauı*), a Web portal that reports the latest information on government revenues and expenditures, and provides regular financial reports and annual financial statements. The Government continues to strengthen the CGE. It has undertaken a recruitment drive and training program for staff aimed at increasing their knowledge and skills.

181. The TCE is responsible for the external audit of the accounts of the Government and its agencies. The TCE enjoys operational independence and its staffing is considered sufficient for it to carry out its duties. A specific committee, whose recommendations are submitted to the legislature’s plenary session for approval, carries out legislative scrutiny of the budget. Rules for budget amendments during the budget execution cycle are clear and these establish limits to which the administration adheres.

182. The State of Piauı and the Federal Government of Brazil possess a great degree of budget transparency. The State publishes timely, electronically and in print form, its annual budget proposal as well as the approved budget. It also provides the general public with periodic budget execution reports. The same level of transparency is more than matched by the Brazilian Federal Government. In fact, the PEFA assessment for the Federal Government rated “A” for public access to key fiscal information (PI-10).

183. In summary, the State of Piauı has an adequate PFM environment to support the proposed operation. In addition, the Government has shown a satisfactory level of commitment to further improving the PFM environment by developing the strategic plan as well as its subsequent actions to support the implementation of reforms.

Foreign Exchange Control Environment

184. The International Monetary Fund (IMF) undertook a Safeguards Assessment of the Central Bank of Brazil in October 2002 and updated it in March 2004. It concluded that

the Central Bank does not present widespread vulnerabilities that could compromise the safeguarding of Fund resources. The Bank also undertook a review of the Central Bank's financial statements to assess the extent to which the foreign exchange control environment continued to be adequate. As part of this review, the Bank examined the financial statements for December 31, 2006 to 2010. These included explanatory notes to the financial statements and a report on the independent audit carried out by an international auditing firm. The latter contained an unqualified opinion on the financial statements for all years. The explanatory notes, an integral part of the financial statements, provide an extensive explanation of the Central Bank's risk management policies, including those related to financial instruments held to manage international reserves.

185. In relation to operational risks, the notes state that the Central Bank “uses internal control systems, which are considered adequate for its activities.” The Bank's conclusion based on the review of the financial statements was that the control environment governing the Central Bank's operations, within which the loan's foreign exchange would flow, continued to be adequate.

E. Disbursement and Auditing

186. The proposed loan will follow the Bank's disbursement procedures for Development Policy Loans. The funds will be disbursed against satisfactory implementation of the Development Policy Loan and will not be tied to any specific purchases. Once the loan is approved by the Board and goes into effect, the proceeds of the single tranche will be deposited by the International Bank for Reconstruction and Development (IBRD) in an account maintained by the State at the *Banco do Brasil S.A.* This commercial bank is an acceptable financial institution for the Bank as it is: (a) financially sound; (b) authorized to maintain the account in the currency agreed between the Bank and the Borrower; (c) is audited regularly, and has received satisfactory audit reports (reviewed December 31, 2010 Financial Statements audited by KPMG); (d) able to execute a large number of transactions promptly; (e) is able to perform a wide range of banking services satisfactorily; (f) is able to provide a detailed statement of the account; (g) is part of a satisfactory correspondent banking network; and (h) charges reasonable fees for its services.

187. This account is denominated in foreign currency and is part of the country's official foreign exchange reserves. The proceeds of the loan will be: (i) used to make budgeted foreign currency payments (such as for imports, etc.) directly from this foreign currency bank account; (ii) transferred from the foreign currency bank account to a local currency bank account of the Government, which the Government will then use to make payments for its budgeted expenditures; or (iii) used in a combination of these approaches. The State will ensure that upon the deposit of the loan into said account, an equivalent amount will be credited in the State's budget management system. The State will provide a confirmation to the Bank that: (i) the loan proceeds were received into the account that is part of the country's official foreign exchange reserves, and (ii) an equivalent amount was accounted for in the State's budget management system. Such a confirmation will be sent to the Bank within 30 days after payment. If the proceeds of the loan are used for ineligible purposes as defined in the Development Loan Agreement, the Bank would require the State to refund the amount. Due to the conclusions related to the adequacy of the State's public financial management environment, no additional fiduciary arrangements will be put in place for the operation.

F. Risks and Risk Mitigation

188. The proposed operation is considered to have moderate risks. Table 6 summarizes the main risks and the proposed mitigation measures.

Table 6. Risks assessed with regard to the sustainability of the policies and programs supported by the DPL

<i>Economic and Fiscal risks</i>	<i>Mitigation Measure</i>
Macroeconomic impact of the Euro zone crisis on Brazil's economy at the country level	Brazil's fiscal framework provides the Government with the flexibility to successfully respond to the global financial crisis with an array of fiscal, monetary, and external measures to stimulate domestic demand. Gross Public sector debt is expected to decline in the future, from 63.1 percent of GDP projected for 2011 to around 58.1 percent of GDP in 2013, despite difficulties in maintaining fiscal balance in the face of large investment needs and pressures from current expenditure growth. Moreover, flexible exchange rates and relatively large foreign reserves should help Brazil address the consequences of a potential external crisis, including a possible abrupt shift in market perceptions and an associated turn-around in capital flows. The banking sector remains highly liquid and capitalized, and Brazil's large international reserves – in excess of \$350 billion – provide ample buffers to react to such events.
Fiscal risks are associated with fiscal responsibility issues and ceilings imposed on the state by the Federal Government.	The projected fiscal and debt paths for the state of Piauí are deemed sustainable in the medium-term. The state is in full compliance with the LRF and the risk associated with the Fiscal Adjustment Program is low. The restructuring of the debt of the State of Piauí with the Federal Government pushed a significant part of the debt service payments to the period 2011-2013. The expected debt amortization next year will consume more than 13 percent of RNR but will still allow for a 46 percent increase on investment. A possible impact on the FPE revenue owing to the impact of the Euro zone crisis on Brazil's economy could be absorbed by a more modest increase on investment.
<i>Social and Environmental Risks</i>	<i>Mitigation Measures</i>
Social Impact. Land regularization policies which could negatively impact small farmers and traditional populations.	The land regularization policy and the associated Law (No 6,127/ 2011) establishes realistic application requirements on family farmers while also creating a route through which they (unlike large farmers) could obtain the land free of charge through grants. Also, the same Law deems ineligible for regularization <i>quilombola</i> lands and occupations of traditional populations as a means of protecting these lands of vulnerable groups from being co-opted by large-scale agriculture. Instead, the unique challenges of land tenure regularization for <i>quilombola</i> lands were adequately addressed by a Decree 14,625.
Environmental aspects. Land regularization policies of past occupation could engender, or fail to redress past negative effects, such as illegal deforestation.	Law No. 6,127 of November 28 2011, which focuses on land that is already occupied, directly links land tenure regularization to the requirement for farmers to be registered in the Rural Environment Cadastre (CAR) and to rehabilitate the area deforested illegally. Law 6,127 also establishes an initial screening process and any land that is deemed by the State Environmental Secretariat (SEMAR) to be of ecological interest will be considered ineligible for regularization. In addition, the State CAR law 6,132 /2011 has a separate broader positive environmental impact as it applies to all private holdings (i.e. those already regularized) ensuring environmental compliance and requiring the rehabilitation and protection of areas illegally deforested.

Annex I: Letter of Development Policy



Estado do Piauí
Palácio de Karnak
Gabinete do Governador

Teresina(PI), 22 de novembro de 2011.

Mr. ROBERT ZOELICK
President
The World Bank
Washington, DC

Ref. LETTER OF DEVELOPMENT POLICY

Prezado Sr. Zoelick,

Esta carta apresenta o Programa de Desenvolvimento Sustentável do Piauí que tem por objetivo a implementação de programas que promovem o desenvolvimento do Estado, atuando em três importantes áreas: o crescimento verde em áreas rurais, a ampliação do acesso e a melhoria da qualidade da educação e a melhoria da eficiência da gestão pública estadual. Acreditamos que as políticas definidas neste programa constituem significativas iniciativas a serem apoiadas pelo Banco Mundial através do DPL. Consideramos de grande importância para a efetivação das mudanças estruturais que podem acelerar nosso processo de desenvolvimento, com benefícios diretos para toda a população de nosso Estado, especialmente para aqueles segmentos mais pobres, que precisam de mais atenção do Poder Público.

Situação macroeconômica, evolução, os desafios e as perspectivas

Apesar de ser um dos estados mais pobres do Brasil, nos últimos anos o Piauí vem apresentando uma dinâmica econômica surpreendente, com crescimento do PIB acima da média brasileira e nordestina. De acordo com o IBGE, o Piauí foi o estado com o melhor resultado no PIB em 2008, com crescimento de 8,8%, superando a média nacional, de 5,2%, e a da Região Nordeste, 5,5%.

Apesar desse crescimento no passado recente, a economia piauiense ainda representa muito pouco no cenário nacional. Em 2008 o PIB ocupava uma fatia de apenas 0,6% da economia brasileira, muito pouco para quem detém 1,6% da população brasileira (IBGE 2010). O PIB do estado do Piauí é um dos mais baixos da nação e seu PIB per capita é o pior entre todos os estados brasileiros. Mas em seis anos o PIB estadual dobrou de tamanho, passando de quase 7,5 bilhões de reais em 2002 para quase 17 bilhões de reais em 2008. Nesse ano o Piauí ficou na 23ª (vigésima terceira) colocação em geração de riqueza, acima apenas de Tocantins, Amapá, Acre e Roraima.

A despeito do crescimento recente o Piauí continua pobre apresentando em 2010 a mais baixa renda per capita do Brasil, entre os estados brasileiros (R\$5, 373) muito abaixo da média nacional (R\$15 990). A distribuição de renda também é altamente desigual. Em 2008, era o quarto estado brasileiro com maior desigualdade (Gini coeficiente 0.57).

A situação fiscal do Piauí melhorou consideravelmente no período 2003-2010. Um indicador desta evolução é o estoque da dívida pública em relação à receita corrente, que caiu de 164% em 2003 para 56 % em 2010. Em termos absolutos, a dívida de 2010 era de R\$2.5 bilhões, quase toda dívida interna. O nível de dívida é baixo. A significativa redução da



divida foi obtido com o rápido nível de pagamento, que tem sido aproximadamente de 50% do serviço da dívida (juros+amortização). Despesas com o serviço da dívida foi, em média, maior de que 11.5 % das despesas liquidam correntes. A ausência de novas operações de crédito no período de 2003–2008 também contribuiu para a redução da dívida.

Agricultura e a dinâmica do meio ambiente

O Piauí enfrenta uma profunda contradição representada pelo baixo patamar dos seus indicadores sociais, por um lado, e pela riqueza de seus recursos naturais por outro. Com uma configuração ambiental que o diferencia dos demais estados da região, o Piauí se localiza numa área de transição entre a floresta amazônica e a caatinga, marcando o território piauiense pela convivência entre diferentes biomas, com a predominância do cerrado e da caatinga. Apesar de ter acompanhado o processo recente de urbanização vivenciado pelo País, o Piauí ainda concentra uma parcela significativa de sua população no meio rural. Segundo os dados do Censo 2010, são 1.067.401 pessoas vivendo na zona rural, o que significa 34,2% da população total do Estado. Comparando com a média nacional de 15,6%, e mesmo com a média nordestina de 26,9% de população rural, percebemos o quão importante é a questão rural no Piauí.

Em 2008, o setor agropecuário era responsável por 10,9% da economia do estado. Um dos principais responsáveis pelo crescimento do setor foram o excelente desempenho do cultivo da soja e outros grãos na região do cerrado, que vem obtendo ganhos de produtividade e incorporando novas áreas de cultivo. Dada essa vocação para a atividade agropecuária e a importância crescente da produção de grãos na região dos Cerrados, é fundamental uma política no sentido da regularização e gestão fundiária nessa região.

Setores Sociais e a Gestão Pública

Do ponto de vista social, na recente classificação feita pelo Ministério do Desenvolvimento Social e Combate à Fome e IBGE, o Piauí tem 665.732 pessoas que vivem abaixo da linha de pobreza, correspondendo a 21,4% da população do Estado. Em termos relativos o Piauí é superado apenas pelo Maranhão (26%) no percentual de população vivendo em situação de extrema pobreza.

A qualidade da educação do Piauí é muito baixa medida pelas avaliações nacionais. O desempenho dos alunos indicado Índice de Desenvolvimento da Educação Básica, (DEB) mostra algum progresso nos anos recentes, mas ainda é necessário melhorar significativamente a qualidade da educação, principalmente na educação secundária. Em 2009 o IDEB do ensino fundamental na 4ª e 8ª séries atingiram 3.8 e 3.4, respectivamente, acima da média do Nordeste, (3.7 e 3.0), mas ainda muito abaixo da média nacional (4.9 e 3.8). No mesmo ano, o IDEB para o ensino secundário do Piauí foi de 2.7, o mais baixo do país.

Dentre os vários problemas enfrentados pela rede de educação pública estadual destacam-se os relacionados à oferta e distribuição de vagas nas escolas, às barreiras à acessibilidade nas escolas, a baixa qualidade do ensino, à gestão escolar ineficiente, à baixa capacidade de coordenar, monitorar e avaliar o sistema educacional e produzir bons resultados no que se refere à aprendizagem.

O Governo estadual considera que todos os desafios do estado só serão adequadamente enfrentados e combatidos com o aumento da eficiência da gestão pública estadual. Neste sentido, foi realizado no período de setembro/2003 e janeiro/2004, sob a coordenação do Ministério do Planejamento e da Fundação Getúlio Vargas um diagnóstico da



administração pública estadual que serviu de base para a elaboração do Programa de Apoio à Modernização da Gestão e do Planejamento do Estado do Piauí – PNAGE – PI identificando os principais problemas e as disfunções que interferem na estrutura orgânica e funcional do Governo do Estado, caracterizando um processo avançado de sucateamento da máquina administrativa.

As ações implementadas nos últimos meses têm o escopo de aumentar a eficiência da gestão pública estadual, contribuindo para essas mudanças na cultura organizacional vigente. A principal delas é a implantação do sistema de gestão orientada para resultados, com a adoção de arranjos institucionais que favoreçam a definição de uma linha condutora dos programas de governo, pautada no equilíbrio fiscal e na modernização e inovação da gestão, garantindo a efetividade das ações planejadas.

O Estado tem demonstrado de forma inequívoca, através da implementação de um conjunto de políticas estruturantes, a disposição de enfrentar e resolver os principais entraves ao desenvolvimento econômico, promovendo a inclusão social, mas para acelerar este processo, precisamos do apoio do Banco Mundial e para isso apresentamos a proposta deste DPL.

As principais políticas e programas que serão apoiados, em grande parte, pelo DPL estão detalhados a seguir:

Crescimento verde em áreas rurais:

Esta política a ser apoiada pelo DPL vem sendo desenvolvida com o objetivo de promover uma agricultura economicamente viável, socialmente justa e ambientalmente sustentável. O Governo estadual considere que há um enorme potencial para o crescimento do setor primário do estado como propulsor do desenvolvimento rural do estado, precisando para tanto: promover a regularização das terras do estado, apoiar os pequenos agricultores e assegurar a conservação dos recursos naturais do Piauí.

Regularização Fundiária

O Piauí enfrenta uma grande restrição à ocupação ordenada do seu território, devido à falta de regularização fundiária das terras pertencentes ao Estado. Tanto os grandes produtores de grãos dos cerrados quanto para os agricultores familiares sofrem esse problema causado pela insegurança jurídica gerada pela ausência de documentação regular das terras, o que dificulta, ou mesmo impede, a expansão da produção, principalmente pela restrição ao crédito, mas também pelos diversos constrangimentos legais sofridos por um produtor que não tem a documentação de sua terra.

A estratégia utilizada pelo Governo do Piauí para minimizar este problema tem sido aperfeiçoar a gestão das áreas públicas ditas devolutas, promovendo a arrecadação destas terras e a devida incorporação ao patrimônio público, para posterior regularização visando beneficiar, prioritariamente, os atuais ocupantes destas terras, evitando assim o crescimento da grilagem, e criando oportunidade ao estado fomentar novos projetos estratégicos para a produção e instalação de indústrias de transformação, agregando valor a nossos produtos, gerando mais emprego e renda, incluindo pessoas, combatendo a miséria, especialmente daqueles que vivem no campo. Essa ação está sendo desenvolvida através das seguintes ações:



- O Governo do Estado do Piauí implementou a política do Programa de Regularização Fundiária, através da Lei Estadual nº 6.127, de 21 de novembro de 2011, que autoriza a doação de terras para agricultores familiares e a venda direta para os demais produtores não enquadrados nessa categoria, que ocupem as terras há pelo menos 5 anos. O Estado relaciona a regularização das terras à sustentabilidade ambiental através de um mecanismo que vincula o recebimento das terras, seja por doação ou compra, à devida inscrição das mesmas no Cadastro Ambiental Rural (CAR), favorecendo o compromisso com o cumprimento da legislação ambiental vigente, ao tempo em que promove a regularização de eventuais passivos ambientais pré-existentes.
- Existe mais de 150 comunidades no estado que pleiteiam o reconhecimento como sendo quilombolas. Ciente desta demanda o estado editou o Decreto nº 14.625, 31 de Outubro de 2011, sobre a regularização das terras quilombolas.

Agricultura Sustentável: Pequenos Agricultores

Para enfrentar o problema da baixa renda dos agricultores familiares, o Estado conta com o Programa Estadual de Geração de Emprego e Renda no Meio Rural (PROGERE), criado pelo Decreto Governamental nº 14.626, de 31 de outubro e 2011, de caráter permanente e será financiado com recursos orçamentários do Tesouro estadual e outras fontes complementares, cujo foco é a inclusão sócio-produtiva em conciliação com o Plano Brasil Sem Miséria, através do apoio a projetos de geração de renda para grupos de agricultores familiares, principalmente de base comunitária.

O Estado conta com o acervo de experiências bem sucedidas de trabalho já realizado na consolidação do capital social, com 2.500 associações comunitárias organizadas, devidamente cadastradas e articuladas com 223 conselhos municipais de desenvolvimento sustentável, com maioria de seus membros representantes da sociedade civil organizada. Foram também estabelecidas parcerias para complementação técnica e financeira com importantes organismos federais e estaduais.

O PROGERE tem como referência para sua atuação os planos e programas com foco territorial e arranjos produtivos locais previstos nas políticas públicas do Estado e formuladas no Plano Plurianual 2012/2015, na Lei de Diretrizes Orçamentárias, na proposta de Orçamento para 2012, descritos no Plano de Ação para o Desenvolvimento Integrado da Bacia do Parnaíba – PLANAP, além de estudos na área de cadeias produtivas já identificadas e que servirão de base para o mapeamento de oportunidades de negócios a nível territorial e local.

Sustentabilidade Ambiental

Essencial também é que a promoção do crescimento da atividade agropecuária seja feita em bases sustentáveis do ponto de vista ambiental, com a implantação de políticas públicas que conciliem a ocupação das terras propícias ao cultivo e/ou criação de animais em condições de respeito às regras da legislação ambiental, garantindo assim a sustentabilidade do processo de desenvolvimento. O estado entende que a preservação do meio ambiente é um típico problema em que ocorre falha do mercado, com elevados custos sociais, ambientais e econômicos, portanto requer intervenção estatal. No caso do Piauí, pela fragilidade e unicidade dos seus biomas e pelo alto índice de população em situação de pobreza, tal



intervenção deve estar fortemente associada à preocupação com a equidade social, com os riscos ambientais e com a escassez dos recursos naturais.

Por essa razão, o Governo Estadual vem desenvolvendo iniciativas nas áreas de Mudanças Climáticas; Compras Sustentáveis; Pagamento por Serviços Ambientais; ICMS Ecológico; Ordenamento da Ocupação Territorial; Cadastro Ambiental Rural; e Gestão de Recursos Hídricos, as quais apontam para uma economia de baixo carbono, com recurso natural eficiente e socialmente inclusiva, a Economia Verde. A proteção ao meio ambiente, portanto é fundamental para garantir a manutenção da nossa biodiversidade, patrimônio que nos garante um diferencial no processo de desenvolvimento. Com o objetivo de garantir a preservação e o uso sustentável dos nossos recursos naturais, o Governo do Piauí adota as seguintes medidas:

- Regularização de passivos ambientais existentes ao tempo em que contribui para evitar a formação de problemas ambientais futuros através do Cadastro Ambiental Rural. O Governo do Estado propôs à Assembléia Legislativa o Projeto de Lei que cria o Cadastro Ambiental Rural-CAR, cujo objetivo principal é incentivar e fomentar o cumprimento da legislação florestal e ambiental, notadamente no que diz respeito à manutenção das áreas de preservação permanente e reservas legais, bem como ao licenciamento ambiental das atividades produtivas realizadas nos imóveis rurais e recuperação de passivos ambientais;
- Ocupação ordenada do espaço rural através do Zoneamento Econômico-Ecológico do Piauí-ZEE/PI com apoio do Ministério do Meio Ambiente – MMA quando foi iniciada a elaboração do Zoneamento Econômico-Ecológico do Piauí - ZEE/PI, com detalhamento dos Cerrados. Este inclui os 10 municípios do sudoeste piauiense inseridos no Bioma Cerrado, com maior incidência de áreas antropizadas. O trabalho contará com ampla participação das comunidades locais, dos setores empresariais e dos poderes públicos municipais, estadual e federal, de modo a garantir legitimidade ao documento. A expectativa é que esse Zoneamento influencie e direcione a ação dos agentes locais rumo a uma ocupação produtiva, sustentável e ordenada do cerrado piauiense;
- Programa de incentivo à gestão ambiental sustentável nos municípios, através da adoção do ICMS ECOLÓGICO, da capacitação de gestores e da educação ambiental. Por solicitação do Governo do Piauí a Assembléia Legislativa aprovou a Lei Estadual nº 5.813, de 03/12/2008, que foi regulamentada pelo Decreto nº 14.348, de 13/12/2010, criando o ICMS Ecológico para beneficiar municípios que promovem ações de proteção ambiental. Tais ações incluem instrumentos de gestão nas áreas de Gerenciamento de Resíduos Sólidos; Educação Ambiental; Redução do Índice de Desmatamento; Controle de Queimadas e Conservação de Água, Solo e Biodiversidade; dentre outras;
- Monitoramento da qualidade das águas. O Estado firmou Acordo de Cooperação Técnica com a Agência Nacional de Águas, o ACT nº 001/2011 / SEMAR/ANA, para implantação no Piauí do Programa Nacional de Avaliação da Qualidade das Águas-PNQA. Serão monitorados 212 pontos na Bacia do Parnaíba. Até final de 2012 serão instaladas 20 sondas móveis, capacitados os 20 técnicos que manusearão as sondas e implantado o laboratório de análises.



Educação e Juventude

O Governo do Estado do Piauí entende que a melhoria do padrão educacional da nossa população é uma das ações mais eficientes no enfrentamento à pobreza, pois traz consigo, simultaneamente, impactos na inclusão social (cidadania) e na inclusão econômica (renda e trabalho). Para galgar patamares mais elevados nos indicadores de educação é fundamental ampliar o acesso e melhorar a qualidade do ensino médio, da educação especial e da educação profissional, além de ampliar as políticas públicas que buscam reduzir o analfabetismo.

A melhoria da qualidade do ensino na escola pública é um desafio político-administrativo e um compromisso social do governo do Piauí que se dá pela articulação de uma série de medidas que têm como foco a escola e a aprendizagem do aluno.

No setor educação, como nos demais setores, o Governo do Piauí tem seguido o programa do governo federal para 2008-2011, que salienta "Desenvolvimento com Inclusão Social e Qualidade da Educação" e é baseado em três pilares: (i) a Agenda de Política Social, que inclui objetivos, tais como aumento ano da formação escolar e técnica; (ii) o Plano de Desenvolvimento da Educação (Plano de Desenvolvimento da Educação, PDE), que inclui objetivos como a melhoria da qualidade do ensino primário, e promover a realização de aprendizagem e assiduidade dos alunos, e (iii) o Programa de Crescimento acelerado (Programa de Aceleração do Crescimento, PAC).

O PDE é o instrumento central da política que faz parte de uma série de medidas para melhorar a qualidade da educação no Brasil. O PDE inclui contratos de desempenho entre os governos subnacionais e o governo federal. Desde a criação deste instrumento, o que melhora o planejamento e coordenação no setor da educação, o Estado do Piauí assina anualmente o PAR e adere ao compromisso com o governo federal, em que promete melhorar a qualidade da educação no Piauí. O IDEB baixo de vários municípios do Piauí levou a Secretaria de Estado da Educação e Cultura (Secretaria da Educação e Cultura do Piauí, SEDUC), com o apoio do Ministério da Educação (Ministério da Educação, MEC), a estabelecer mecanismos para prestar assistência técnica aos municípios para a elaboração de seus respectivos PARs e implementação de políticas e atividades educacionais. Foi dada prioridade a 91 municípios com menor IDEB, e para os 155 municípios onde a população com 15 anos ou mais anos de idade tem uma taxa de analfabetismo acima de 35 por cento.

Dessa forma em cumprimento ao PAR, a estratégia do Governo do Piauí, sob a coordenação da Secretaria Estadual da Educação, está focalizada na ampliação do acesso à alfabetização e ensino fundamental dos jovens e adultos que não frequentaram a escola no período adequado; o acesso ao ensino médio de qualidade, reforçando o uso de tecnologias que favorecem o processo de ensino-aprendizagem, ao tempo em que fortalece a gestão da escola como ponto chave para o bom desempenho da rede estadual de educação. Nesse campo, o Governo do Estado do Piauí adota as seguintes ações e políticas:

- Programa de ensino a distância com mediação tecnológica através do Decreto nº 14.628, de 31 de outubro de 2011, promovendo o uso intensivo das tecnologias da informação e comunicação para ampliar as vagas no ensino médio, o número de horas/aula, reforço nas áreas de ciências, português e matemática e ensino técnico profissionalizante ao mesmo tempo em que melhora a qualidade do ensino nas escolas públicas, principalmente nos municípios do interior do Estado;
- Programa Qualiescola, que busca reduzir as taxas de abandono e repetência nas escolas estaduais e melhorar a qualidade do ensino; fortalecimento da gestão das



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escolas através da realização de seleção com critérios técnicos e por mérito para o cargo de gerente regional de educação e da realização de eleições diretas para o cargo de diretor de escola, processos que se tornaram política pública através dos Decretos 14.385, de 12 de janeiro de 2011 e 14.607, de 14 de outubro de 2011 respectivamente;

- Instituição do Sistema Estadual de Avaliação que irá avaliar o aluno, a turma, a escola e a gestão das instituições de ensino através do Decreto nº 14.624, de 31 de outubro de 2011;
- Programa de Alfabetização na Idade Certa – todas as escolas, sejam estaduais ou municipais, deverão alfabetizar as crianças entre 6 e 8 anos de idade;
- Implementação de programa específico para redução do analfabetismo;
- Implementa a expansão da jornada escolar ampliada – Escola de Tempo Integral, nos moldes do Mais Educação, programa do Ministério de Educação que oferece atividades educativas e promove a participação do aluno durante todo o dia na escola.

Adicionalmente, para dar mais ênfase à política da juventude e combater os crescentes índices de violência entre os jovens, o Governo do Piauí criou a Coordenadoria da Juventude, através da Lei Estadual nº 162, de 30 de Dezembro de 2010 e da Lei Estadual do Plano Estadual da juventude (Lei nº 5.903, 14 de outubro de 2009) que promove a participação dos jovens na discussão e formulação de políticas públicas que afetam este segmento.

Gestão Pública

O Governo reconhece que o sucesso de todas estas ações depende da eficiência do Estado na implementação das várias políticas públicas que visam à melhoria da qualidade de vida da população piauiense. Ciente desse desafio o Governo do Piauí implementa desde o início de 2011 um modelo de gestão orientada para resultados que se pauta pelo monitoramento contínuo das metas do governo. No campo da busca da eficiência da gestão pública o Estado adota as seguintes ações:

- Adoção de um modelo de gestão baseado na busca de resultados, através do monitoramento e avaliação de programas prioritários de governo com metas definidas pela equipe de Governo, coordenada pessoalmente pelo Governador do Estado, com a realização de reuniões semanais de monitoramento das ações; O Estado criou um Comitê para articular a gestão para resultados com a gestão financeira, no sentido de aperfeiçoar o uso dos recursos públicos. Este Comitê foi criado através do Decreto nº 14.637, de 22 de novembro de 2011; Identificação de um conjunto de resultados prioritários de governo e de seus respectivos programas e projetos de suporte, garantindo assim uma gestão mais focada e com maior capacidade de entregar bens e serviços públicos de qualidade.

Pedido de apoio financeiro

Acreditamos que as políticas públicas descritas nesta carta contribuem de forma articulada e sustentável para promover o desenvolvimento econômico com inclusão social no Estado. Dessa forma o Governo do Piauí manifesta firme disposição de consolidar a parceria



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com o Banco Mundial por meio do apoio financeiro a ser efetivado através de um DPL no valor de US\$ 350.000.000,00 (trezentos e cinquenta milhões de dólares americanos) em parcela única, a ser liberada em 2012, destinado a apoiar as políticas descritas nesta Carta.

Destacamos ainda que a parceria com o Banco vai além do aspecto estritamente financeiro, uma vez que o processo de negociação e execução da operação representa uma verdadeira consultoria sobre os temas tratados.

Atenciosamente,


WILSON NUNES MARTINS
Governador do Estado do Piauí

**ENGLISH TRANSLATION OF THE LETTER OF DEVELOPMENT POLICY FOR
THE PIAUÍ GREEN GROWTH AND INCLUSION DEVELOPMENT POLICY LOAN**

Teresina (PI), November 28, 2011.

Mr. ROBERT ZOELLICK
President
The World Bank
Washington, DC

Ref. LETTER OF DEVELOPMENT POLICY

Dear Mr Zoellick,

This letter presents the Sustainable Development Program of Piauí State that aims to implement development programs targeting three important areas: green growth in rural areas, expanding access to education and improving its quality, and increasing public management efficiency in the state. We believe that the policies outlined in this program constitute significant initiatives to be supported by a World Bank DPL. We consider the program extremely important to achieve structural change capable of accelerating our development process, bringing direct benefits to the entire state population and especially to the poorest segments, which require more attention from the public power.

Macro-economic situation, evolution, challenges and prospects

Despite being one of Brazil's poorest states, in the last years the economy of Piauí has proved to be surprisingly dynamic, with an above average rise in GDP when compared to the whole country and to the Northeast. According to the Brazilian Institute for Geography and Statistics (IBGE), in 2008 Piauí presented the largest GDP increase of all states, growing 8.8percent, above the average growth rate for Brazil, of 5.2percent and the 5.5percent growth in the Northeast.

Despite its recent growth, the state's economy still represents only a small part of the national economy. In 2008 its GDP represented a mere 0.6 percent of the Brazilian economy, much too little for a state that is home to 1.6 percent the country's population (IBGE 2010). The GDP of Piauí state is one of the lowest in the country and its per capita GDP is the worst of all the Brazilian states. In a period of six years its GDP doubled, however, going from almost 7.5 billion reais in 2002 to close to 17 billion reais in 2008. This year Piauí ranked 23rd in terms of generation of wealth, having surpassed only the states of Tocantins, Amapá, Acre and Roraima.

Despite this recent growth Piauí continues poor. In 2010 its per capita income was the lowest of all the Brazilian states (R\$ 5,373), much below the national average (R\$ 15,990). Income distribution is also highly unequal. In 2008, it was the fourth most unequal state in the country (Gini coefficient 0.57).

Piauí's fiscal situation improved considerably in the period of 2003-2010. One indicator of this evolution is the stock of public debt in relation to public revenue, which dropped from 164 percent in 2003 to 56 percent in 2010. In absolute terms the state debt in 2010 was of \$ 2.5 billion, consisting almost entirely of internal debt. Debt is at a low level. This significant decrease in debt was achieved through rapid payment, at about 50 percent of debt servicing (interests + amortization). Debt service expenses were on average more than 11.5 percent of net current expenses. The absence of new credit operations during the period of 2003-2008 also contributed to reducing the debt.

Agriculture and environmental dynamics

Piauí faces a profound contradiction represented by low social indicators on the one hand and abundant natural resources on the other. With unique environmental characteristics that set it apart from the other states of the region, Piauí is located in a transition zone between the Amazon forest and the caatinga. Different biomes coexist in its territory with a predominance of cerrado and caatinga vegetation. Despite having kept up with the recent urbanization process experienced in the country, a significant part of the state's population is still concentrated in rural areas. According to data of the 2010 Census, 1,067,401 people or 34.2 percent of the entire population of the state live in rural areas. A comparison with the national average of 15.6 percent or even with the northeastern average of 26.9 percent shows how important the rural issue is for Piauí.

In 2008 the agriculture sector accounted for 10.9 percent of the state's economy. Growth was driven mainly by the excellent performance of soy and other grains in the cerrado region, with growing productivity gains and incorporation of new planted areas. Given its vocation to agriculture and the rising importance of grain production in the cerrado region, it is essential to implement a land regularization and land management policy in the region.

Social Sectors and Public Management

From a social perspective, a recent classification by the Ministry of Social Development and Fight Against Hunger and IBGE found that 664,732 people live below the poverty line in Piauí, which corresponds to 21.4 percent of its total population. In relative terms only the state of Maranhão (26 percent) has a greater percentage of the population living in extreme poverty.

National assessments show that the quality of education in Piauí is very low. Although the Basic Education Development Index (IDEB) shows a certain progress in student achievement in recent years, significant improvements are still required in terms of education quality, especially in secondary education. In 2009, the primary school IDEB for the 4th and 8th grades reached 3.8 and 3.4 respectively, which is above the average for the Northeast (3.7 and 3.0) but still well below the national average (4.9 and 3.8). That same year the secondary school IDEB in Piauí was 2.7, the lowest in the country.

Among the many problems found in public education in the state are few and unequally distributed vacancies, accessibility barriers in schools, low quality teaching, inefficient school management, deficient coordination, monitoring and evaluation capacity within the educational system, and an inability to achieve good learning results.

The State Government considers that an adequate solution to these many challenges will only be possible by making public management more efficient. In this sense, from September 2003 to January 2004 the Ministry of Planning and the Getúlio Vargas Foundation conducted a public management assessment in the state that served as grounds for the National Program to Support Modernization of Management and Planning in Piauí State - PNAGE-PI. The assessment identified the main problems and inefficiencies that interfere in the organic and functional structure of the State Government and diagnosed an advanced trashing process in the public bureaucracy.

Over the past months many measures have been taken to increase public management efficiency while at the same time helping to change the organizational culture. The main measure consists of implementing a results-based management system, with institutional arrangements that favor the definition of a driving thread in governmental programs guided by fiscal equilibrium, modern and innovative management, and effectiveness in planned activities.

By implementing a set of structuring policies the state has given an unequivocal indication of its willingness to face and solve the main barriers to economic development and promote social inclusion. But to accelerate the process we need support from the World Bank, which has led us to present this DPL proposal.

The main policies and programs that will to a great extent be supported by the DPL are detailed below:

Green growth in rural areas:

This policy is being developed to promote economically feasible agriculture that is fair and environmentally sustainable. The State Government believes that there is a tremendous potential for growth in the primary sector driven by rural development. This will involve regularizing land ownership, supporting small-scale producers and ensuring natural resource conservation in the state.

Land Regularization

Piauí is finding it hard to enforce orderly land occupation due to the lack of land titles for state-owned lands. Both large-scale grain producers of the cerrado and family farmers suffer from legal insecurity generated by the absence of regularized land deeds, which makes it difficult, or even impossible, to expand production. This is mainly the result of credit restrictions, but also due to the various legal restrictions imposed on producers whose lands are not legally titled.

To minimize this problem the Piauí State Government is improving management of unclaimed public lands, incorporating them to the public estate for subsequent regularization. In the end, this policy aims foremost to benefit the current holders of these lands, thereby avoiding an increase in illegal land grabbing and trading (*grilagem*) and creating opportunities for new strategic public projects geared to rural production and deployment of transformation industries. Such projects will add value to our products, generate jobs and income, promote social inclusion and combat extreme poverty, especially in rural areas. To this extent, the strategy involves the following activities:

- The Piauí State Government implemented the Land Regularization Program through State Law nº 6.127 of 21 November 2011, which authorizes lands to be donated to family farmers and sold directly to other categories of rural producers that have been occupying the land for at least 5 years. The state links land regularization to environmental sustainability through a mechanism that requires any lands that are received through donation or purchased to be registered in the Rural Environmental Register (CAR). Environmental legislation compliance is thereby favored at the same time as regularization of eventual pre-existing environmental liabilities is fostered.
- Over 150 communities in the state claim recognition as slave descendant *quilombolas*. Aware of these claims in October 2011 the state issued Decree nº 14,625 31 to regularize *quilombola* lands.

Sustainable Agriculture: Small-scale Farmers

To tackle the problem of low income obtained by family farmers, the State Program to Generate Jobs and Income in the Rural Milieu (PROGERE) was instituted through Governmental Decree nº 14,626 of 31 October 2011. The program is permanent and will be funded through budgetary resources of the State Treasury and complementary sources. It focuses on socio-productive inclusion in synergy with the Brazil Without Poverty Plan by supporting income generation projects among groups of family farmers, especially community-based projects.

The state has a collection of successful social capital consolidation experiences, with 2500 duly registered organized community organizations connected to 223 municipal sustainable development councils. Most of their members are representatives of organized civil society. Partnerships were also established with important federal and state agencies for technical and financial complementariness.

The PROGERE takes as reference the territorial plans and programs focused and local productive arrangements foreseen in state public policies and formulated in the 2012-2015 Multi-Year Plan, the Law of Budgetary Directives, the draft 2012 Budget, and described in the Action Plan for Integrated Development of the Parnaíba Valley - PLANAP, as well as studies on identified production chains that will form the basis to map business opportunities at the territorial and local levels.

Environmental Sustainability

It is also essential to ensure that agricultural growth is promoted upon sustainable grounds, with public policies that reconcile the occupation of lands for cropping and/or cattle ranching with respect for environmental law. The state understands that environmental preservation typically implies addressing a situation of market failure with high social, environmental and economic costs, and therefore requires state intervention. In the case of Piauí, due to the frailty and uniqueness of its biomes and high percentage of the population living in poverty, any intervention will need to be careful to take into account social equity and environmental hazards and scarcity of natural resources.

In view of the above, the State Government launched initiatives in the areas of climate change, sustainable procurement, payment for environmental services, Ecological Tax on

Circulation of Goods and Services (Ecological ICMS), land occupation planning, Rural Environmental Register, and water resources management. All of them point towards a low carbon economy with efficient and socially inclusive use of natural resources. In other words: a green economy. Environmental protection is therefore fundamental to guarantee the maintenance of our biodiversity, which is what provides our competitive advantage in development. With the aim of guaranteeing preservation and sustainable use of our natural resources, the Piauí State Government took the following measures:

- Regularization of existing environmental liabilities while contributing to avoid future environmental problems through the Rural Environmental Register. The State Government proposed a bill to the Legislative Assembly creating the Rural Environment Register with the main goal of encouraging and fostering forest and environmental law compliance, particularly as regards maintenance of permanent preservation areas and legal reserves, and to ensure environmental licensing for productive activities developed in rural properties and recovery of environmental liabilities.
- Orderly occupation of rural areas through the Economic Ecological Zoning of Piauí-EEZ/PI, supported by the Ministry of Environment-MMA since the beginning, detailing the areas of cerrado vegetation. This includes the 10 municipalities of southeastern Piauí that are part of the cerrado biome and present the greatest level of enthronezation. Local communities will participate extensively in the process to ensure the legitimacy of the final document, as will the private sector and public sector at the municipal, state and federal levels. The EEZ is expected to influence and direct the local agents towards orderly and sustainable productive occupation of the Piauí cerrado.
- Program to encourage sustainable environmental management in the municipalities through adoption of the Ecological ICMS, capacity-building for senior managers and environmental education. Per request of the Government of Piauí, the Legislative Assembly approved State Law n° 5,813 of 3 December 2008, regulated by Decree n° 14,348 of 13 December 2010, which creates the Ecological ICMS to benefit municipalities that take measures to protect the environment. These measures include management instruments to: manage solid wastes; promote environmental education; reduce deforestation; control slash-and-burn techniques and conserve water, soil and biodiversity; among others.
- Monitoring water quality. The state signed a Technical Cooperation Agreement ACT n° 001/2011 / SEMAR/ANA with the National Water Agency to deploy the National Water Quality Evaluation Program-PNQA in Piauí. In total 212 points of the Parnaíba Basin will be monitored. By the end of 2012 20 mobile probes will be installed and 20 technicians will be trained to operate the probes and conduct laboratory analyses.

Education and Youth

The Piauí State Government believes that improving our population's education level is one of the most efficient ways of fighting poverty due to its simultaneous impacts on social inclusion (citizenship) and economic inclusion (jobs and income). Expanding access to secondary education, special education and professional development and improving their quality are essential conditions to rise to a higher threshold in education indicators. Up scaling public policies to reduce illiteracy is equally important.

Improving the quality of teaching in public schools is a political administrative challenge and a social commitment of the Piauí State Government that is tackled through a series of interconnected measures focused on schools and student learning.

In the education sector, as in all others, the Piauí Government abides by the Federal Government Multi-Year Plan for 2008-2011 that emphasizes "Development with Social Inclusion and Quality Education" based on three pillars: (i) the Social Policy Agenda that includes objectives like increasing the number of years of school and technical education; (ii) the Educational Development Plan-PDE, that includes goals like improving the quality of primary education and promoting student learning and school attendance, and (iii) the Growth Acceleration Program-PAC.

The PDE is one of the policy's core elements and is part of a series of measures to improve the quality of education in Brazil. It includes performance contracts between subnational governments and the Federal Government. Every year since this instrument was created to improve planning and coordination in the education sector, the Piauí State Government signs the PAR and joins the Federal Government's commitment to improving the quality of education in the state. The low IDEB in various municipalities of Piauí led the State Education and Culture Secretariat-SEDUC, supported by the Ministry of Education-MEC, to establish mechanisms to extend technical assistance to municipalities to prepare their PARs and implement education activities and policies. Priority was given to the 91 municipalities with the lowest IDEB, and to the 155 municipalities where the population aged 15 and older presents an illiteracy rate greater than 35 percent.

In compliance with the PAR and in coordination with the State Education Secretariat, the Piauí State Government focuses its strategy on expanding access to literacy and elementary education for youths and adults that did not go to school at the right age; access to quality secondary education, reinforcing the use of technologies that favor the teaching-learning process while strengthening school management as a key point to ensure good performance in the state education network. In this field, the Piauí State Government adopts the following measures and policies:

- Technology-based distance education program created through Decree nº 14,628 of 31 October 2011, promoting intensive use of ICT, increasing the number of secondary education vacancies and class/hours, reinforcing Science, Portuguese and Math as well as technical professional education, and at the same time improving the quality of education in public schools, especially in the state's inland municipalities.
- Qualiescola Program, which seeks to reduce dropout and retention rates in public schools and improve the quality of education; strengthening school management by selecting the regional education manager according to technical criteria and merit to and by holding direct elections for school directors, processes that will become public policy through Decrees 14,385 of 12 January 2011 and 14,607 of 14 October 2011, respectively;
- Implementation of the State Evaluation System through Decree nº 14,624 of 31 October 2011 to assess students, classes, overall school environment and school management in teaching institutions;
- Literacy at the Right Age Program - all state and municipal schools must teach children aged 6 to 8 to read and write;

- Implementation of a specific program to reduce illiteracy;
- Extension of the school day – Full Time School in the molds of the More Education programs of the Ministry of Education that offer educational activities and promote day-long school attendance.

In addition, to upscale youth policies and combat the rise in violence among young people, the Piauí Government created the Youth Office through State Law n° 162 of 30 December 2010 and the State Youth Plan through Law n° 5.903 of 14 October 2009, which promotes youth participation in discussing and formulating public policies that affect this segment.

Public Management

The Piauí State Government recognizes that the success of all these activities depends on the state's efficiency in implementing the various public policies aimed at improving the quality of life of its population. Aware of this challenge, since 2011 a results-based management model is in place supported by continuous monitoring of governmental targets. To improve public management efficiency, the following measures were taken:

- A results-based management model was instituted where priority governmental programs are monitored and evaluated according to clear targets defined by the management team and personally coordinated by the Governor, with weekly meetings to monitor activities. The State Government created a committee to link results-based management to financial management with a view to improving the use of public funds through Decree n° 14,637 of 22 November 2011. A set of priority results was identified for the Government and its various programs and projects, thus ensuring more targeted management and an improved ability to deliver quality public goods and services.

Request for Financial Support

We believe that the public policies described in this letter contribute to promoting economic development with social inclusion in the state in a coordinated and sustainable manner. As such, the Piauí State Government expresses its firm disposition to consolidating a partnership with the World Bank by seeking financial support for the policies described in this letter through a Development Policy Loan in the order of US\$ 350,000,000.00 (three hundred and fifty million dollars of the United States of America) through a single installment to be disbursed in 2012.

We highlight that this partnership with the Bank is more than a financial support, as the process of negotiating and executing this operation functions as a true consultancy on the topics addressed.

Sincerely,

WILSON NUNES MARTINS
Governor of the State of Piauí

Annex II: Development Policy Matrix

Policy Area	Policy Actions: Single-Tranche Prior Actions (Completed)	Outcome Indicators by June 2013
Component A. Promote Green Growth in Rural Areas		
Sub-component A1. Improve Land Tenure Security		
Regularize land tenure for small family farmers and larger producers with particular focus on the Cerrado	<ul style="list-style-type: none"> State Law No. 6,127 of November 21, 2011 approved, authorizing donation of land to family farmers occupying and/or working said land and sale to larger-scale producers occupying and working the land for at least 5 years 	<ul style="list-style-type: none"> 100% increase in the number of applications for rural land tenure regularization submitted to INTERPI 15% increase in the number of eligible Common PRONAF (excluding PRONAF A and B) credit applications received
Regularize land tenure for quilombola communities	<ul style="list-style-type: none"> Decree No. 14,625 of October 31, 2011 enacted, creating the Program for Land Regularization for <i>Quilombola</i> Communities 	
Sub-component A2. Promote Sustainable Agriculture		
Increase employment and income in family farming: productive inclusion	<ul style="list-style-type: none"> Complementary Law No.162 of December 30, 2010s enacted, creating the Directorate of Rural Poverty Alleviation under the Secretariat of Rural Development (SDR); and the Decree No.14,626 of October 31, 2011 enacted, creating the “State Program for the Elimination of Rural Poverty” (PROGERE), and the Program Unit to manage it 	<ul style="list-style-type: none"> PROGERE operating in 112 municipalities
Sub-component A3. Ensure Environmental Sustainability		
Promote sustainable use of rural landscapes	<ul style="list-style-type: none"> State Law No. 6,132 November 28, 2011 approved, creating the Rural Environmental Cadastre 	<ul style="list-style-type: none"> 130,000 ha of land in the CAR in the Cerrado region.
Component B: Improve Access to and Quality of Education		
Sub-component B1. Improve Access to Basic Education		
Increase access to secondary education programs	<ul style="list-style-type: none"> Decree No. 14,628 of October 31, 2011 enacted, creating the program to introduce technology and distance learning strategies in the provision of secondary education 	<ul style="list-style-type: none"> 20% increase in the number of enrollments in secondary education through the use of the Piauí Digital Program and other technologies
Sub-component B2. Improve Management and Learning Outcomes of Public Schools		
Improve quality of basic education in the state	<ul style="list-style-type: none"> Decree No. 14,627 of October 31, 2011 enacted, establishing remedial/accelerated learning programs to decrease age-grade distortion and improve flow and quality of basic education in state public schools 	<ul style="list-style-type: none"> Decrease, by at least 1 percentage point annually, from 38.1 in 2010 to 36 by June 2013, in the percentage of children more than two years behind grade level in grades 1 to 4 in state public schools
Strengthen School Management and learning	<ul style="list-style-type: none"> Decrees No 14,385 of January 13 2011 and No 14,607 of October 14, 2011 enacted, establishing the system of merit-based selection for regional 	<ul style="list-style-type: none"> Selection of all the regional managers through the new selection process ,and at least

Policy Area	Policy Actions: Single-Tranche Prior Actions (Completed)	Outcome Indicators by June 2013
outcomes for public schools	managers and school principals respectively	80% of school principals selected according Decree 14,607 ⁴⁵
Sub-component B3. Strengthen the Participation of Vulnerable Youth in Public Policies and Programs		
Promote policies for increased social and economic inclusion of youth	<ul style="list-style-type: none"> Complementary Law No. 162 of December 30, 2010 enacted, creating the State Coordination Agency for Youth 	<ul style="list-style-type: none"> 50% increase in number of Municipal Youth Councils created by <i>portaria</i> from 8 Municipal Councils in 2010.
Component C. Increase the State's Public Management Efficiency		
Strengthen the institutional framework for efficient public service delivery	<ul style="list-style-type: none"> Decree No. 14,637 of November 22, 2011 enacted, creating a results-based management system and a GoP Steering Committee to monitor a portfolio of priority projects linked to the Strategic Multi-Year Plan 2012–2015 	<ul style="list-style-type: none"> 60% of state projects or programs included in the results-based management system

⁴⁵ This includes the 484 schools, which have more than 200 students, plus the secondary and technical-vocational schools.

Annex III: Fund Relations Note

IMF Executive Board Concludes 2011 Article IV Consultation with Brazil

Public Information Notice (PIN) No. 11/108

August 3, 2011

Public Information Notices (PINs) form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case.

On July 20, 2011, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Brazil.⁴⁶

Background

1. Brazil has made remarkable strides over the last decade, emerging as a leading actor on the global economic stage. A strong policy framework and sustained political commitment to reduce inflation and public debt levels has increased the resilience of the economy to external shocks. Moreover, the increased macroeconomic stability, combined with well-targeted social policies, has allowed the country to take advantage of favorable external conditions over the past decade to accelerate growth and reduce poverty and inequality to historic lows.

2. The economy has recovered strongly from the crisis growing last year by 7.5 percent, with the unemployment rate falling to historic lows of 6.4 percent in May this year, and output estimated to now be above potential. Activity has been moderating since the middle of last year, but buoyant domestic demand has contributed to some widening of the current account deficit to 2.3 percent of Gross Domestic Product (GDP) in 2010, notwithstanding the very favorable prices for Brazil's key commodity exports. Moreover, strong demand and tightening labor market conditions, combined with commodity price shocks, have led to rising inflation. Indeed, inflation reached the top of the 2.5–6.5 percent inflation target band in May.

3. Credit has been growing fast for several years now, reflecting in part a process of financial deepening, with the credit-to-GDP ratio rising from 24 percent of GDP in 2004 to 46 percent of GDP in 2010. Bank credit to the private sector continues to grow rapidly, rising by 20 percent in April 2011. Lending by private banks, which fell sharply during the crisis, has rebounded very strongly. Meanwhile, public bank lending, which was ramped up during the crisis to offset the fall-off in private lending, also continues to expand at a rapid pace. Responding to concerns about excessive risk-taking in some market segments, the authorities late last year introduced various macro-prudential measures aimed at moderating credit growth.

4. Brazil remains a favored destination for international investors, reflecting in part its favorable economic prospects and high yields. Net capital inflows have been accelerating and reached US\$52.6 billion through end-April, almost twice as high as over the same period in 2010. Foreign direct investment flows have increased sharply in recent months, reflecting mainly investments in large projects, while external borrowing by banks and corporations rose fast earlier in the year. To manage inflows, the authorities have used all parts of their policy tool kit. With the

⁴⁶ Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summing up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

exchange rate appreciating to high levels, intervention has continued with purchases of about US\$37 billion in the spot market in the first half of 2011. As such, Brazil's reserves have reached US\$335 billion at end-June, the sixth largest holding in the world. The authorities have also been introducing various capital flow management measures that have gradually gained some traction in moderating incentives for capital flows.

5. The authorities have been gradually withdrawing policy stimulus. The monetary policy target rate was raised by 200 basis points during April-July 2010. After a mid-cycle pause of several months, the policy rate has been increased again by 150 basis points since the beginning of the year, to reach 12.25 at end-June. Fiscal policy ended up providing a substantial procyclical stimulus in 2010 as the economy was already recovering. However, the authorities earlier this year announced a package of spending reductions (relative to the initial budget) equivalent to 1.2 percent of GDP and a primary surplus target of about 3 percent of GDP for 2011. Combined with plans for reducing Treasury transfers to the development bank BNDES, this should contribute to a withdrawal of fiscal stimulus in the current year.

Executive Board Assessment

6. Executive Directors commended the authorities for their sound macroeconomic management and strong policy framework, which increased Brazil's resilience to external shocks, spurred economic growth, and promoted greater social equity. Directors agreed, however, that although the outlook remains broadly favorable, there are signs of overheating. Accordingly, they stressed the importance of further calibrating the policy mix to address near-term macroeconomic pressures.

7. Directors welcomed the authorities' decision to phase out the fiscal stimulus introduced during the crisis. They considered that additional fiscal tightening would support disinflation and the management of capital inflows, while reducing the need for raising further Brazil's already high interest rates. Directors supported the authorities' decision to reduce the exceptional funding provided to the National Development Bank, in view of the rapid credit expansion.

8. Directors supported the tightening of monetary conditions by the central bank to contain inflation risks. They agreed that, while the pick-up of inflation reflects in part commodity price shocks, strong demand and labor market pressures have also been key factors. Directors welcomed the central bank's commitment to tighten monetary policy as needed to meet the midpoint of the inflation target band by end-2012.

9. Directors agreed that overall financial soundness indicators are favorable. They stressed, however, the need for heightened vigilance against financial risks, given the pace of credit growth and continued reliance on external borrowing. Directors observed that macro-prudential policies have played a helpful role in slowing credit in some segments, but a few Directors noted that such policies may need to be applied more broadly to gain traction. Directors commended the authorities for steps taken to ensure a smooth transition to new international standards under Basel III. They also welcomed the authorities' decision to undertake a Financial Sector Assessment Program (FSAP) update next year.

10. Directors took note of the authorities' pragmatic use of the policy toolkit for managing capital inflows. Macroeconomic policies have been appropriately tightened, the exchange rate has appreciated substantially, and official foreign exchange reserves have increased. Directors considered that the authorities' use of capital flow management measures has been appropriate. However, a number of Directors cautioned that these measures are prone to circumvention, while many Directors noted that attendant costs should also be taken into account and pointed to their distortionary effects. Many Directors recommended that further macroeconomic policy adjustment be part of the response to large capital inflows.

11. Directors underscored the need to tackle longstanding structural rigidities. They encouraged the authorities to implement key fiscal reforms, including increasing budget flexibility, reforming the state VAT system, and implementing the social security reform. Directors noted that measures to improve the business climate and enhance competitiveness would lower structurally high interest rates and boost long-term growth prospects.

Annex IV: Detailed Country and State Economic Context

A. Recent economic development in Brazil

Brazil's relative resilience to the global financial crisis reflected good macroeconomic management and a solid financial system. Following the global crisis in September 2008, Brazil suffered a sudden reduction in external and domestic credit, and significant currency depreciation. Rapidly falling external demand and a sharp decline in investment led to a 4.2 percent contraction in gross domestic product (GDP) in the fourth quarter of 2008 followed by a 2 percent decline in the first quarter of 2009. The recession, however, lasted only those two quarters. Prompt response by the authorities avoided a credit crunch, and mitigated the impact of the global financial crisis on the Brazilian economy, which recovered rapidly. After experiencing almost zero growth in 2009, the economy grew at a 7.5 percent annual rate in 2010.

The Government responded to the 2008-09 global crisis by injecting liquidity into the banking system, reducing interest rates, and providing fiscal and quasi-fiscal stimulus. The credibility built over the previous decade allowed the Government to adopt expansionary fiscal and monetary policies. The primary surplus of the non-financial public sector fell from 3.4 percent of GDP in 2008 to 2 percent in 2009, due mainly to the effects of automatic economic stabilizers, tax cuts for selected consumer goods and increases in public investment. The Central Bank cut its policy rate by 500 basis points, reduced reserve requirements, and encouraged larger banks to support smaller ones through loan portfolio operations. These policies led to a rapid recovery of the nation's credit markets.

During 2009-2010 growth was driven by domestic demand, fueled by expansionary fiscal policies and rapid credit growth. Household consumption accounted for 4.4 percentage points of the 7.5 percent increase in economic activity registered in 2010. Investments grew by a robust 21.9 percent. Fiscal policy was appropriately countercyclical in 2009 and remained expansionary in 2010, driven by strong rigidities in current expenditures, the political cycle, and difficulties in quickly reversing the countercyclical measures enacted in the previous year. Treasury funding of the economic and social development bank, BNDES, expanded from R\$1.8 billion in 2007 to R\$100 billion in 2009 and R\$80 billion in 2010. Overall, lending by public banks grew by 105 percent between August 2008 and July 2011, while private bank lending rose by 53 percent. According to the Brazilian monthly employment survey, average real income grew by 4.4 percent in 2010, while the number of people employed rose by 2.9 percent.

At least until mid 2011, large portfolio inflows exerted a strong upward pressure on the *real* and were accompanied by growing private sector indebtedness. While the pattern of capital flows that have been financing the current account deficit has shifted away from portfolio flows towards a higher reliance on FDI, a further build-up of reserves is possible in 2012. The currency, which had already appreciated by 11.9 percent in 2010, traded at a high of R\$1.59 per US dollar at the end of August 2011, a 44 percent appreciation since the start of 2009. The Central Bank rapidly accumulated international reserves, reaching US\$358 billion in December 2011 (up from US\$237.4 billion in December 2009). This was accompanied, however, by an increase of about 50 percent in Brazil's external debt, from US\$198 billion in 2009 to US\$301.5 billion in end-November 2011, of which 15 percent had a maturity of up to 360 days. Broadly defined gross external debt, however, including intercompany loans and nonresident holdings of domestic fixed income instruments, has also increased significantly, from US\$373.4 billion to US\$537.3 billion between 2009 and November 2011. Private sector gross external indebtedness, in particular, rose 65 percent over this period, reaching US\$344.5 billion. The biggest increase occurred among banks, whose gross external debt reached \$140.7 billion, a 121 percent increase with respect to December 2009. At the same time, the appreciation of the *real* together with the strength of domestic demand contributed to a widening of the current account deficit in 2010, which reached US\$47 billion or 2.3 percent of GDP in that year (compared to 1.5 percent in 2009). Foreign direct investment (FDI) inflows also increased significantly, totaling US\$48 billion, and were more than sufficient to finance the current account deficit (as they have been since 2002).

Table 1: Brazil - Key Macroeconomic Indicators and Projections, 2005-2015

Indicator	2005	2006	2007	2008	2009	Est.	Projection				
						2010	2011	2012	2013	2014	2015
National Accounts											
	(annual real percent change, unless noted)										
Real GDP Growth (%)	3.2	4.0	6.1	5.2	-0.6	7.5	3.2	3.5	4.2	4.2	4.2
	(in percent of GDP, unless noted)										
Gross domestic investment	15.9	16.4	17.4	19.1	16.9	18.4	19.1	20.7	21.6	21.9	21.9
Public sector	2.5	2.5	2.6	2.9	3.0	3.2	3.2	3.2	3.3	3.4	3.4
Private sector	13.5	13.9	14.8	16.2	13.9	15.2	15.9	17.6	18.3	18.6	18.5
External Sector											
	(in US\$ billions, unless noted)										
Current account	14.0	13.6	1.6	-28.2	-24.3	-47.5	-53.8	-64.1	-45.8	-57.8	-68.3
Trade balance	44.7	46.5	40.0	24.8	25.3	20.3	26.3	18.2	25.3	30.6	36.9
Exports (fob)	118.3	137.8	160.6	197.9	153.0	201.9	250.6	278.8	302.0	324.7	348.7
Imports (fob)	73.6	91.4	120.6	173.1	127.7	181.6	224.3	260.6	276.7	294.1	311.9
Nonfactor services, net	-8.3	-9.6	-13.2	-16.7	-19.2	-31.1	-37.2	-40.1	-40.0	-42.9	-45.9
Income and current transfers, net	-22.4	-23.2	-25.3	-36.3	-30.3	-36.7	-43.0	-42.2	-31.2	-45.5	-59.2
Direct investment, net	12.5	-9.4	27.5	24.6	36.0	37.0	57.9	65.3	69.7	74.4	82.6
Portfolio investment, net	4.6	4.3	37.9	3.5	50.5	57.8	44.7	41.4	42.6	45.7	48.8
Gross international reserves	53.3	85.2	179.5	192.9	237.4	287.5	358.5	394.6	404.9	444.5	485.2
Current account (% of GDP)	1.6	1.2	0.1	-1.7	-1.5	-2.3	-2.2	-2.5	-1.8	-2.1	-2.3
Non Financial Public Sector											
	(in percent of GDP, unless noted)										
Total Revenues and Grants	35.8	35.9	35.7	36.6	36.1	36.2	37.7	37.7	38.0	38.1	38.2
Total Expenditure	39.2	39.4	38.3	38.0	39.3	37.8	40.4	40.5	40.8	40.6	40.6
Current Expenditure	37.0	37.4	36.3	35.5	36.8	35.2	37.2	37.4	37.6	37.2	37.2
<i>of which: Interest payments</i>	7.3	6.8	6.0	5.4	5.3	5.3	5.7	5.9	5.9	5.5	5.4
Capital Expenditure	2.1	2.1	2.0	2.5	2.5	2.6	3.2	3.2	3.3	3.4	3.3
Primary Balance	3.9	3.3	3.4	4.1	2.1	2.4	2.9	3.0	3.0	3.0	3.0
Overall Balance	-3.4	-3.5	-2.6	-1.3	-3.2	-2.9	-2.7	-2.8	-2.8	-2.5	-2.4
Gross Public Sector Debt	69.2	68.1	66.5	70.7	67.9	66.8	63.1	60.5	58.1	55.5	53.3
Domestic Debt	59.9	60.3	61.4	65.2	63.8	63.4	60.5	57.6	55.2	52.6	50.5
External Debt	9.3	7.8	5.1	5.5	4.1	3.4	2.7	2.8	2.9	2.9	2.7
Prices and Economic Activity											
	(annual percent change, unless noted)										
GDP Deflator	7.2	6.1	5.9	8.3	5.7	7.3	7.3	6.0	5.2	5.3	4.8
Consumer Price Index (eop)	5.7	3.1	4.5	5.9	4.3	5.9	6.3	4.5	4.5	4.5	4.5
Producer Prices (av)	5.6	0.8	5.6	13.7	-0.2	5.7	5.9	5.3	4.9	4.8	4.7
Memorandum items:											
Nominal GDP (LCU)	2,147	2,369	2,661	3,032	3,185	3,675	4,069	4,465	4,894	5,370	5,864

Source: IMF, BCB, IBGE, EIU, WB Calculation

To address risks of overheating, in 2010 the Central Bank adopted a contractionary monetary policy stance, which was subsequently complemented with a tighter fiscal policy in 2011. Consumer price inflation (IPCA), as measured by the Brazilian Institute of Geography and Statistics (IBGE) closed 2010 at 5.9 percent. To control inflation, the Central Bank increased the policy rate by 375 basis points, starting in April 2010, to 12.5 percent in June 2011. Furthermore, in February, 2011, the Government announced cuts in budgeted expenditures of R\$50 billion, which, coupled with strong revenue performance enabled it to generate a larger primary surplus of approximately 2.91 percent of GDP by November 2011, compared to 2.4 percent in 2010 (see Table 1 for Key Macroeconomic Indicators).

While inflation has continued accelerating during most of 2011, starting in August the Central Bank eased its policy stance in response to the worsening global economic outlook. During most of 2011, labor market conditions tightened, with record levels of job creation and historically low unemployment (5.2 percent in November 2011). Inflation reached 6.5 percent in 2011, in line with the upper limit of the inflation target. However, since August 31, 2011, in response to a perceived deterioration in the outlook for global growth and the expectation that it will have a disinflationary impact

in Brazil; the Central Bank has reduced its policy rate by 200 basis points to 10.5 percent. Moreover, after having used macro-prudential measures to contain credit growth during the previous monetary tightening cycle, in November, 2011, the Central Bank significantly reduced capital requirements for consumer loans, in some cases by 50 percent. On the fiscal policy front, however, the Government intends to maintain its current contractionary policy stance. In particular, it has announced a commitment to primary surplus targets of 3.1 percent of GDP in both 2012 and 2013.

Economic activity decelerated significantly during the second half of 2011 reflecting both domestic and external factors. On one hand, the deceleration has been driven by the tighter monetary and fiscal policy stances adopted by the Government during the first half of the year. On the other hand, the fiscal crisis in the Euro zone has led to a worsening of the global economic outlook coupled with a reduction in business and consumer confidence. In this context, GDP growth was zero in the third quarter of 2011, a sharp deceleration with respect to the 0.8 percent growth observed, on average, during the previous four quarters. The industrial sector was arguably already being hardly hit by global economic developments, as reflected in the appreciation of the *real* and the deceleration of external demand for Brazilian manufactured products. On the demand side, the deceleration observed during the third quarter was driven by the contraction of domestic demand, especially government consumption (-0.7 percent), followed by gross capital formation and household consumption (respectively -0.2 and -0.1 percent). More recent data suggest that economic activity continued to be weak in the fourth quarter, albeit with some signs of moderate recovery starting in November. While in October industrial production and broadly defined retail sales (including vehicles and construction material) contracted by respectively 0.6 and 0.4 percent month-on-month (strictly defined retail sales were flat in that month), they expanded by respectively 0.3 and 1.5 percent in November (1.3 percent for narrow retail sales). Similarly, the Central Bank's IBC-Br index, a proxy for monthly GDP, exhibited a -0.32 percent contraction in October but expanded by 1.15 percent in November.

The banking system appears well prepared to absorb a possible worsening of the credit portfolio. Early stage delinquency indicators (loans that are between 15 and 90 days overdue) have been rising gradually over the last year, mainly in the consumer segment (6.9 percent in October 2011 up from 5.3 percent in December 2010). Even though this development portends higher non-performing loan (NPL) ratios in the upcoming months, potentially aggravated by the ongoing economic deceleration, banks appear well prepared to withstand such negative developments. The system-wide solvency ratio currently stands at around 17 percent, as supervisors have been phasing in tightened capital requirements in anticipation of Basel III while banks have obtained robust profits which they have been able to capitalize. Similarly, while housing loans have grown very strongly (47 percent in the year to October 2011, accounting for 44 percent of growth in bank loans to individuals), there is a low risk of an "asset bubble" developing in Brazil's real estate markets. Indeed, those loans still represent only 10 percent of total private sector credit and their delinquency rates have fallen significantly thanks to the improvement of the mortgage foreclosure system.

The current account remained stable during 2011 while FDI has exhibited solid growth even as the global economic outlook has deteriorated. The current account deficit totaled \$47.3 billion in the twelve months prior to October 2011. Indeed, sharp growth in the trade surplus – \$31.1 billion in the year to October, 2011, compared to \$17.3 billion a year before – driven by a rise in export prices, has been compensated by higher remittances of profits and dividends and growing international travel expenditures. FDI, however, totaled \$75.1 billion in the twelve months prior to October 2011, compared to \$36 billion in the year to October 2010. Going forward, the current account deficit is expected to increase slightly in 2012, driven by lower growth in export prices and a reduction in the trade surplus. While FDI may experience a moderate reduction in 2012, due to the unfavorable external scenario and a deceleration in domestic demand, it is expected to remain strong over the medium term and help finance the majority of the current account deficit (see Table 1).

The prospect for growth in foreign portfolio investments is less positive. Driven mainly by high real domestic interest rates at a time of exceptionally low interest rates internationally, these inflows have put strong upward pressure on the real and prompted the authorities to increase taxes on financial transactions (IOF) of foreign fixed income investments from 2 to 6 percent in October 2010. This measure, together with recent increases in global risk aversion associated with the fiscal crisis in Europe, has already caused a slow-down in portfolio flows – e.g. from \$66.3 billion in the twelve months prior to October 2010 to \$23.3 billion in the year to October 2011. Going forward, these inflows could be negatively affected by the increased international turmoil. Moreover, while real interest differentials are likely to remain large, the recent Central Bank decisions to reduce the policy rate will diminish the stimulus for carry-trade operations.

B. CURRENT MACROECONOMIC OUTLOOK

While GDP growth is expected to be slightly above 3 percent in 2011 and to remain below 3.5 percent in 2012, the medium-term macroeconomic outlook points to an annual GDP growth rate of between 4 and 4.5 percent. In the short term, the forecast is for lower growth compared to previous periods, as the Brazilian economy suffers the consequences of the deterioration in the global economic outlook. Besides the lower growth forecast, negative developments in the rest of the world may have an impact on Brazil's external and fiscal accounts in the short term. In the medium term, growth is likely to be driven by strong domestic aggregate demand. Investment growth, in particular, will be spurred by the development of new offshore oil fields and preparation for upcoming mega sporting events.

In the short term, the external sector is one of the main sources of Brazil's vulnerability to a global slowdown through possible impacts on trade volumes, commodity prices and exchange rate movements. A worsening of the global economy caused by a full-blown euro zone debt crisis and/or a US recession, may translate into lower external demand for Brazil's exports⁴⁷, while a Chinese hard landing would hit Brazil's terms of trade, and demand for exports, given the significant demand from China⁴⁸. The current account deficit is expected to increase slightly in 2012, driven by a decline in the trade surplus, owing mainly to lower growth in export prices. As the current-account deficit widens, the Real could weaken slightly in nominal terms against the US dollar, as was observed during the third quarter of 2011. Nonetheless, Brazil's vulnerability to external events will remain low due to its high reserves and favorable debt composition (see Table 1).

Secondly, the banking sector is vulnerable to continued global slowdown given the exposure of some small and medium sized banks to liquidity risk. Small and medium sized banks, currently holding 8 percent and 12 percent of the Banking system's assets still largely rely on more volatile sources of funding-- time deposits from institutional investors, credit assignments and DPGEs (large deposits whose FGD's guarantee is due to be expire at year's end). However, system-wide assessment of banks indicates that Brazil's banking system currently has solid liquidity levels and capital cushions⁴⁹.

Further worsening of the global economic environment also poses risk to the fulfillment of fiscal targets. The achievement of primary surplus targets may be affected by the deceleration of economic activity, as federal revenues could decline and social protection expenditures are likely to increase. Moreover, despite the Government's current commitment to using mainly monetary policy levers to counter the ongoing economic deceleration, recent policy measures suggests that it remains open to adopting complementary fiscal and quasi fiscal stimuli if economic activity were to decelerate more sharply. In particular, in early December the Government announced a set of fiscal stimuli, consisting

⁴⁷ Currently, exports to the Eurozone represent about 20 percent of total exports, while exports to the US account for 9.5 percent of total exports respectively.

⁴⁸ China is the primary destination of Brazil's exports. The share of China in Brazil's exports stood at 16.8 percent in October 2011.

⁴⁹ See December 2011 Fitch report.

mainly in reduced tax rates for white line appliances and other selected goods and financial transactions for a total potential fiscal impact of about R\$7.6 billion.

Box 1. Brazilian Fiscal Federalism and the Control of Sub-National Fiscal Performance

The fiscal stance of Brazilian states has always been an important element in macroeconomic management in Brazil. Until the late 1990s, the expansionary fiscal policies by the states and the lack of effective controls over their indebtedness resulted in frequent sub-national debt crises. On three different occasions (1989, 1993 and 1997) the Federal Government had to assume and reschedule the debts of the States. The largest operation occurred in 1997, under Law 9496, when the Federal Government restructured R\$200 billion (12 percent of national GDP) of the debts owed by the States.

In the 1997 refinancing operation, the debts were refinanced for 30 years. This refinanced debt, so called *intra-limite* debt, carries a real interest rate of 6 percent with the nominal value of the debt rising by inflation. The debt service was capped at 13 percent of states' net current revenues. Any debt service above the 13 percent cap is recapitalized and added to the *intra-limite* debt stock. At the end of the contracts (in 2028), if there are residual debt balances, the State must pay off the remainder within 10 years.

The 1997 bailout was conditioned upon the State's compliance with medium-term fiscal adjustment and structural reform programs. In exchange for the rescue package, the debt renegotiation contracts mandate the implementation of three-year rolling Programs of Fiscal Adjustment (PAFs) to be agreed upon by the National Treasury Secretariat and the 25 states that had their debt rescued by the STN during the period of the contract. The PAFs set annual targets on indebtedness, primary balances, personnel spending, tax revenue and public investment, in order to guarantee a gradual decline in indebtedness. In addition, the PAFs include structural reforms such as privatization or other public sector modernization initiatives.

The controls on subnational fiscal performance were further strengthened by the approval of the Fiscal Responsibility Law (*Lei de Responsabilidade Fiscal* – LRF) in 2000. The LRF institutionalized fiscal discipline at all levels of government, incorporating hard budget constraints into a single unifying framework. It explicitly prohibits debt refinancing operations between different levels of government, thereby addressing the moral hazard problem in intergovernmental fiscal relations caused by sequential bailouts. Complementary Senate resolutions also prohibit borrowing if: (i) the net consolidated debt exceeds twice net current revenue (RLC – *Receita Líquida Corrente*) (ii) new credit operations exceed 16 percent of RLC; and (iii) debt service exceeds 11.5 percent of RLC. Borrowing is also prohibited if it violates the debt reduction schedules set by the debt renegotiation contracts under the Law 9496. Finally, emission of Subnational Governments bonds is generally prohibited through 2016; however, states whose net debt is less than net current revenue can issue bonds after 2011, although even here the Federal Government retains to the option to review the decision to issue bonds.

This system of controls has resulted in repeated state and municipal surpluses—an adjustment that has continued through four federal administrations. In addition, this system has also favored the adoption of appropriate expenditure programs by Sub-national Governments. Besides the controls on indebtedness, FRL requirements improved transparency and in strengthening of budgetary practices.

Transparency: budget outturns and compliance with the LRF—including a statement of corrective measures if the relevant provisions are breached—are reported on a regular basis. Municipalities and states are also required to report the fiscal outturns of the previous year to the Ministry of Finance. The legislative branch of each level of government, aided by their respective Court of Accounts, monitors observance with the fiscal targets and ceilings.

Budget Institutions: the LRF introduces more stringent requirements on fiscal targets in the preparation of the Budget Guidelines Law (*Lei de Diretrizes Orcamentárias* – LDO), strengthening its role in budget preparation and fiscal management in general. The LRF also calls for a detailed assessment of the Government's contingent liabilities and strengthens the link between the Annual Budget Law (*Lei de Orçamento Anual* – LOA) and the LDO. A complementary Fiscal Crime Law is applied to all levels of the public administration, with the possibility of detention for those public officials not complying with the LRF.

In the medium term, Brazil also faces structural challenges that limit its long-term growth potential. A short list of challenges includes developing a private market for long-term financing and improving the business environment in particular, reducing the costs associated with complying with tax obligations and obtaining business permits and licenses. Other important issues are the need to increase public and private investment, so as to address growing infrastructure bottlenecks and achieve faster

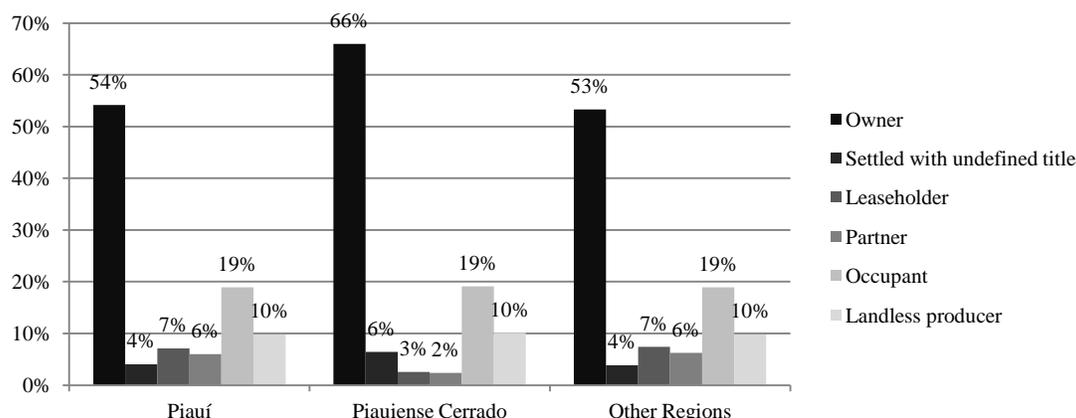
productivity growth, and that of improving the effectiveness and cost-effectiveness of public expenditures.

Despite the above external risks and domestic challenges, the Government's overall macroeconomic framework is deemed sustainable in the medium term and adequate for the purposes of a DPL. Brazil's fiscal framework (See Box 1 for more details on Brazilian Fiscal Federalism) has provided the Government with the flexibility to successfully respond to the 2008/09 global financial crisis with an array of fiscal, monetary, and external measures to stimulate domestic demand. Gross public sector debt is expected to decline in the future, from 63.1 percent of GDP projected for 2011 to around 58.1 percent of GDP in 2013, despite difficulties in maintaining fiscal balance in the face of large investment needs and pressures from current expenditure growth. Moreover, flexible exchange rates, relatively large foreign reserves and a well capitalized banking system should help Brazil address the consequences of a potential external crisis, including a possible abrupt shift in market perceptions and an associated turn-around in capital flows.

Annex V: Overview of Piauí land regularization context and policies

As shown below (Figure 1), insecure land tenure rights, as represented by the proportion of landless producers, occupants and those settled with undefined title, are a third or more, including in the Cerrado where most of the state's production of grains and commodities for export is concentrated.

Figure 1. Status of land tenure rights of producers in Piauí



The land prices vary across the state according to its agricultural potential. Table 1 presents is based on the price defined by the Federal Credito Fundiario Program for land covered with natural vegetation for each municipality. The municipalities were then classified by biome. Teresina was treated separately because as the state capital its prices are not directly linked to rural activities As expected, the highest average price is for Cerrado areas (R\$250) and lowest for the semi-arid ones (R\$80). The average land price for remaining area (classified as “others” in Table 1) is R\$150 but is subject to the most variation spanning from R\$35 to R\$400. This is because those areas range from good soils near river valleys to poor sandy soils in the coast.

Table 1: Summary of Un-serviced Land Prices in Piauí by Region

Region	Number of Municipal.	Minimum Price R\$/ha	Maximum Price R\$/ha	Average Price R\$/ha
Cerrado*	25	160	300	250
Semi-Arid	89	50	300	80
Other (excluding Teresina)	106	35	400	150
Teresina	1	-	-	1000

Based on List in Law 5966 of 2010

Source: Derived from raw land prices used in the Program to Combat Rural Poverty, SDR Piauí, 2011

Table 2: Requests for Regularization under Law 5,066/2010 between 01/10 and 06/11

	Requests to buy land already occupied (plots between 350 ha and 2,500 ha)	Requests to receive land through grants (plots less than 350 ha)	Total
Number of applications	912	209	1,121
Percentage of applications	81%	19%	100%
Area of land	670,398 ha	14,057 ha	684,455 ha
Average size of plot	482 ha	67 ha	-

Source: INTERPI 2011

INTERPI was not on track to adequately process these applications ahead of the December 2011 expiration of Law 5,966/2010, due to limitations in its capacity and the need to confirm a match between lands being requested for purchase and actual occupation by the claimants. To date INTERPI has analyzed only 220 of the 912 applications for purchase, accounting for 15 percent of the land covered by the universe of purchase requests. It reports that it takes an average of 10 months to fully process a case, including issuance of the title. Another limitation was that Law 5,966 of 2010 covered only Cerrado municipalities and even then only a subset.

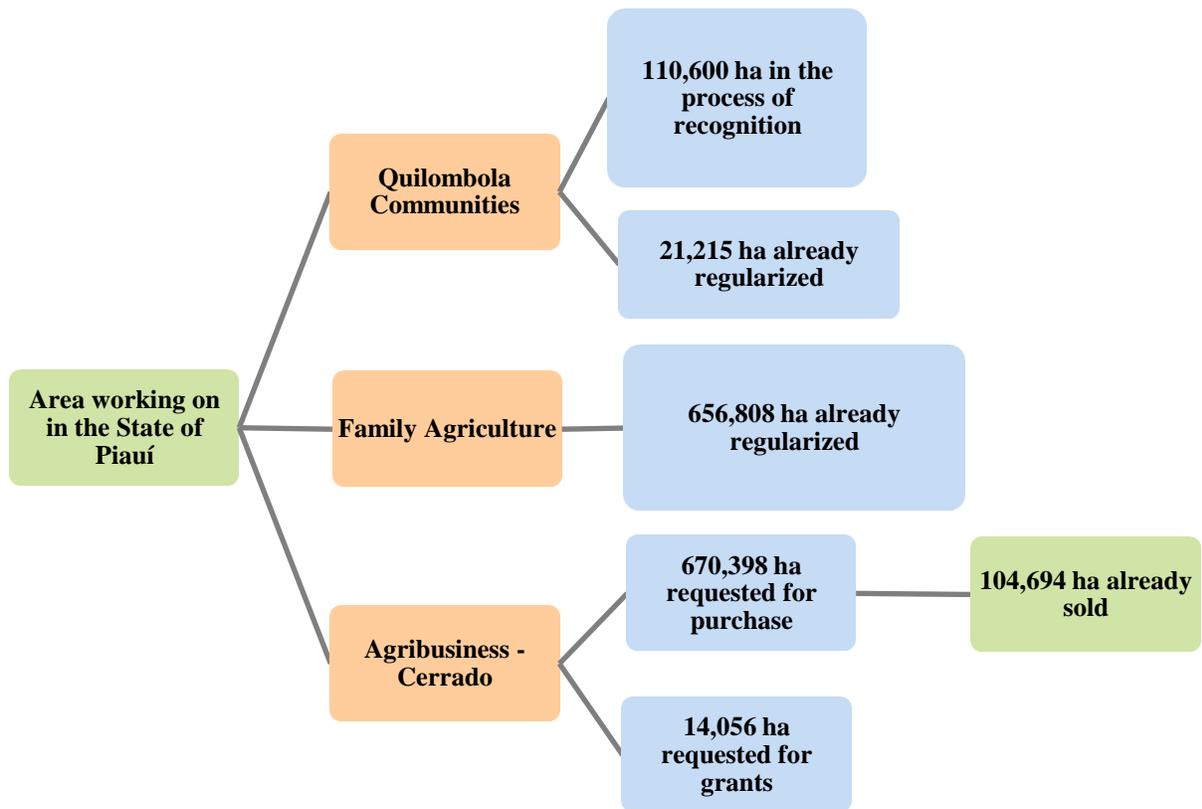
To put the current regularization challenge into context, in its 31 years of existence, INTERPI, through the establishment of settlement projects, has regularized the situation of 10,032 family farmers (including *quilombola* families) in an area of 678,023 hectares either through the issuance of permanent titles (until 1988) or Concessions for the Real Right of Use. Another 6,488 farmers have benefited from regularization through the issuance of Concessions for the Real Right of Use in areas outside settlement projects, in an area of 11,670 hectares. Although the total land area impacted by all of these historic regularization actions is nearly identical to the extent of land covered by recent applications under Law 5,966/2010, the number of claimants under this 2010 law is only about one-tenth of the total number historically regularized by INTERPI. Given the major advances in surveying and georeferencing technologies in recent years, it is reasonable to expect that INTERPI, with some capacity strengthening and business-process reengineering, can increase its productivity going forward, especially if this productivity is partly measured by the total area of land that it regularizes in a fixed time period.

With the increased occupation of Brazilian rural areas, *quilombola* areas are more and more under threat because they have no land title or formal rights to the land. To rectify this situation, the Brazilian Constitution of 1988 for the first time recognized the right of *quilombolas* to receive from the state the land they occupy. However, not much changed until 1995, when a Federal Decree defined the process and terms for recognition of *quilombola* lands. The first step is for the *quilombola* community to file a claim for the land and present its sociocultural distinctiveness. This request is in turn processed by land tenure agencies with the participation of social agencies.

About 3,500 communities nationwide had filed claims by 2010, including 193 communities in Piauí. On average each claim benefits about 100 families and covers 9,000 hectares. However, there are cases in which the population and occupied area are much larger due to local environmental and historical conditions. This is the case of the *quilombola* area of Lagoas in Piauí, composed of 1,498 families and occupying more than 62,000 hectares. According to data from the State Coordination Office of *Quilomba* Communities of Piauí, in 2006 there were 172 communities registered in the institution with the intention of asserting themselves as *quilombolas*. However, according to the monitoring report on the formalization processes in INCRA, to date only 45 communities have filed requests for regularization. Of these, 30 have indicated neither the area to be regularized nor the number of families to be covered. For the 15 communities where such data was supplied, the area claimed spans 110,601 hectares, reportedly with 3,146 families. The other 122 communities that have not yet applied for regularization are thought to contain at least 3,400 families, and it is quite probable that this number may be significantly higher.

A summary of key statistics related to land regularization, including regularization in *quilombola* communities is presented in Figure 2. It is important to note that the size of the challenge going forward is larger than implied in this diagram because many family farmers and some agribusiness have never applied for regularization, especially since Law 5,966/2010 applied only to the Cerrado and even then only to a subset. Under the new Law No. 6,127 of November 21, 2011, many of these potential applicants are expected to submit applications.

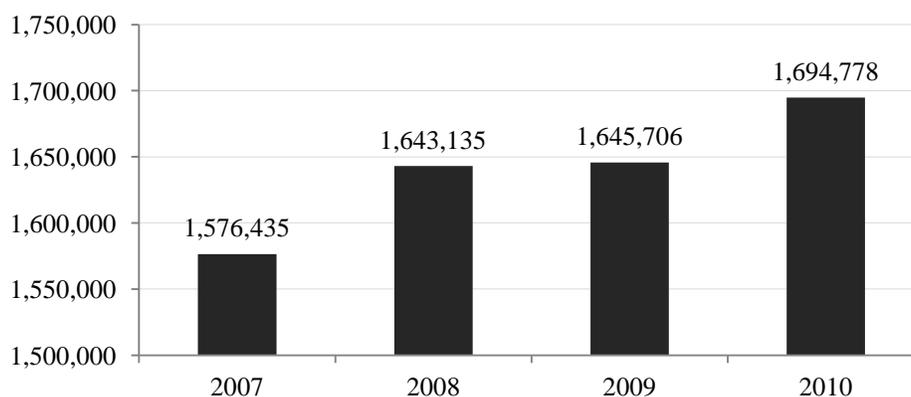
Figure 2. Diagram of key statistics related to land regularization in Piauí



Annex VI: Overview of Piauí agricultural context and policies

Cattle ranching is the state's traditional agricultural activity. The state's cattle herd has been growing steadily (Figure 1) and reached nearly 1.7 million in 2010. Most of this activity is carried out by small farmers; 70 percent of ranches raise 20 animals or fewer.

Figure 1. Evolution of Piauí's cattle herd from 2007 to 2010



Meanwhile agricultural production has been growing especially in the Cerrado region, over the past 15 year (Table 1).

Table 1. Comparison of Piauí's agricultural production over time

Crop	Production (1000 t)			Increase 2000–2010
	2000	2010	2011*	
Soybeans	100.8	868.5	1,144.3	761.32%
Corn	229.3	353.6	705.1	49.34%

Source: Conab, preliminary data

Despite its agro-ecological potential, Piauí still suffers from rural poverty. As early as the late 1970s, the GoP and the World Bank had already identified the reduction of poverty levels in rural areas as a priority issue for cooperation and agreed to address the problem jointly. This collaboration began with the implementation of the Program for the Integrated Rural Development of the Northeast (POLONORDESTE) and continued in the 1980s with the implementation of the Program for the Parnaíba Valley and the Support Program for Small Rural Producers, known as PAPP. In the early 1990s, based on experience gained from these projects, the World Bank and the GoP decided to adopt a new approach to reducing rural poverty, which ensured the direct allocation of resources to targeted beneficiaries, using participatory methodologies and instruments that allowed the decentralization of activities in municipalities and communities. Thus, the first generation of a series of interventions known in Brazil as the *Programa de Combate à Pobreza Rural* (PCPR; English acronym RPRP, Rural Poverty Reduction Program), was launched; it ran from 1997 until early 2010.

Substantial challenges remain and there are areas that clearly require improvement. The demand for basic infrastructure, for example, which is ultimately linked to poverty reduction and the improvement of production services, has not yet been met. According to the Brazilian Institute of Geography and Statistics (*Instituto Brasileiro de Geografia e Estatística*, IBGE), 53 percent of Piauí's population is still living in poverty despite the fact that Piauí in recent years has shown GDP growth rates above the average for the Brazilian Northeast. There is a clear need to continue to emphasize public policies focused on the reduction of poverty rates in the state.

Lessons can be drawn from the implementation of the PCPR. The GoP is now proposing a revised strategy based on this, with a focus on improving employment and income through regionally focused

interventions, aiming to raise the living conditions of beneficiaries in a sustainable manner through improved participation in agricultural markets. Thus, economic integration and further decentralization of government are at the center of the GoP's proposed Productive Inclusion Program, whose aim is to consolidate and scale up progress made through PCPR interventions.

State Agricultural Programs

Piauí's State Animal Health Program: The State of Piauí is by and large based on an agricultural economy, within which the livestock sector plays an important role for domestic food production and income generation. According to the Agricultural Protection Agency of the State of Piauí (*Agência de Defesa Agropecuária do Estado do Piauí*, ADAPI), more than 63,000 farms are raising cattle and approximately 70 percent of these farms are composed of small farmers with up to 20 heads of cattle only. Thus, cattle raising is deeply rooted in the local rural economy and is a major income-contributing factor.

One of the key challenges for the sector is related to a highly infectious, sometimes fatal viral disease known as foot-and-mouth disease (FMD), which affects cloven-hoofed animals. FMD is the primary concern for Piauí in terms of its State Animal Health Program.

Beef produced in states such as Piauí that are not FMD-free is subject to Brazilian as well as international trade restrictions, which hamper trade across states within Brazil, as well as international exports. Brazilian legislation applicable to non-FMD-free states restricts the movement of animals from one state to another; this in turn leads to productivity losses (i.e., restrictions on genetic improvement, etc.) and lower prices for domestically raised livestock and beef. Access to international markets is also severely hampered by the fact that Piauí is currently categorized as being at medium risk regarding FMD occurrence. This fact prevents access for beef from Piauí to international beef markets, which increasingly reward the sanitary quality of the herd and livestock traceability systems. These restrictions at national and international level hamper the development of the beef production chain in the state, since modern meat processing industries have little interest in installing themselves in Piauí to serve only the local population of about three million people.

To overcome these constraints the Federal Ministry of Agriculture, Livestock and Supply (MAPA), with the consent and participation of the states, has developed several programs, including the National Program for Prevention and Eradication of FMD. This program is the basis for GoP's own regulation and enforcement activities, with the ultimate goal of eradicating FMD. The centerpiece of the GoP's State Animal Health Program is an aggressive vaccination campaign against FMD, accompanied by an array of supporting efforts, such as the consolidation of the farm property cadastre system, improved movement controls of susceptible animals, enhanced veterinary surveillance, and specific actions for (veterinary) health, education and awareness raising.

Based on these efforts, Piauí progressed from its status of "unknown risk of FMD contamination" to a "medium risk" status, which constitutes just one level before the ultimately desired classification as a "zone free of FMD with vaccination." With regard to the economic importance of the continuous progression toward FMD-free status, it is important to note that the price of cattle (per head of livestock) has increased dramatically (by 200 percent on average) due to Piauí's transition from unknown FMD risk to medium risk. This underlines the fact that the positive progression of Piauí's animal health status constitutes the fundamental basis for small farmers to invest in increasing productivity and production. Eventually, it is envisioned that the progressive lifting of sanitary restrictions at national and international levels will not only positively affect the state's economy but will also have direct positive impacts on the livelihoods of a large number of farming families involved in cattle raising.

The GoP's agricultural development agenda will include the State Animal Health Program with a focus on cattle and on eradicating FMD. The containment of FMD demands considerable efforts in terms of vaccination, strict monitoring, trade restrictions and quarantines, with the ultimate goal of avoiding the

culling of potentially millions of FMD-affected animals. The proposed operation supports the broader policy envelope in which ADAPI will develop further capacity, allowing the regular and ongoing implementation of these vaccination campaigns in the future. The ultimately desired outcome for the State of Piauí is to obtain the status of “FMD-free zone with vaccination,” as recognized by the World Organization for Animal Health (OIE) within the next two to four years.

Piauí’s Program on the Safe Use and Management of Agricultural Pesticides. A further challenge related to sustainable rural production and hence green rural growth is the proper handling and safe use of pesticides in agriculture. Pesticides are chemical or biological substances intended for preventing, destroying, repelling or mitigating insect pests, plant pathogens, weeds, microbes, etc. that destroy property, spread disease, or are vectors for disease or cause a nuisance. Although there are—in particular circumstances—certain benefits to the use of pesticides in terms of increased farm output, there are also drawbacks, such as potential toxicity to humans and other animals.

A major challenge, mainly in family farming, is in the proper use of pesticides and the disposal of pesticide packaging and empty containers. The large amount of pesticides used in Piauí’s agriculture (8,529 tons in 2010), and particularly the improper disposal of pesticide containers in the field, constitute a serious threat to human health and the environment. Inappropriate disposal is mainly due to a lack of awareness among farmers regarding the toxicity of these substances, even in small amounts, remaining in left-behind containers. Soil contamination as well as surface and groundwater pollution are the results, which in turn cause the extinction of natural enemies and pollinators, thereby negatively interfering with the state’s native flora and fauna, which is ultimately the basis for its green growth strategy. An equally important problem is that the use of the empty containers by the farmers to store liquids or food poses serious health risks.

The challenge for the GoP in this area is to develop clearly defined, long-term actions in order to reduce unintended pesticide damage to human health and the environment. This could be done, for example, through systematic advisory services in the form of a technical assistance product on Integrated Pest Management which, among other things, would look into the proper disposal of empty pesticide packaging, as well as the promotion of activities that will raise awareness and encourage changes in the behavior of farmers and rural workers regarding the importance of correct and safe disposal of empty pesticide containers. Ultimately, the relationship of farm-based proper disposal to the overall health situation of the rural population, consumers of agricultural products, and the environment will be at the center of a comprehensive GoP-led awareness campaign.

Within the broader context of the promotion of sustainable agriculture, the GoP will further promote the safe use and management of agricultural pesticides. A state law was enacted on December 30, 2010 to regulate the control of agrochemicals, their components, and related products in the State of Piauí. This emerging legislative framework outlines basic training activities for farmers and producers and contains both educational and enforcement/supervision aspects regarding the safe use of pesticides. It is also fully in line with the Bank’s OP 4.09 on pest management. This activity could be further supported by the SWAp, which is currently expected to follow the DPL.

Piauí’s Participation in the National Program on Crop Insurance. The occurrence of drought and floods is common in the Semi-Arid region. Producers, in particular small-scale farmers, face a variety of price, yield and resource risks that affect their agricultural output and income year to year. In order to assist family farmers in coping with climate risks, in 2003 the Federal Government of Brazil established the National Crop Insurance Program. Under this program, states are responsible for coordinating the implementation of the program and allocating resources to the Crop Insurance Fund, based on state demand for the insurance. Piauí was one of the first states to sign the Participation Agreement, assisting 18,761 producers and paying R\$8.3 million in insurance in 2003. As a key instrument to minimize family farmers’ crop losses, the GoP increased the program’s coverage over the years, reaching 84,452 producers and paying R\$40.7 million in insurance for the 2010–2011 crop season.

Annex VII: Overview of Piauí Environmental context and policies

Rapid expansion of commercial agriculture and agribusiness in Piauí over the last decade has increased the challenges of sustainable agricultural growth. The principal concern is with the rapid occupation of the southwestern Cerrado (savanna) lands by private commercial-crop agriculture and its social and environmental impact. The GoP has defined a core area of 25 of Piauí's 224 municipalities,⁵⁰ covering 69,800 km² or 28 percent of the state area, where agricultural development is likely to be concentrated. The occupation of the Cerrado by large mechanized and partly irrigated soybean cultivation over the last 15 years is environmentally significant because it implies suppression of native vegetation (forest and bush clearing), with impacts on biodiversity, quality and quantity of surface and groundwater, and other ecological functions of native vegetation cover. It also has social dimensions because it affects the lives and economy of smallholders in the region, who live in the lowland valleys between the plateaus where mechanized soybean farming is being established.

Table 1 presents the area authorized for clearing in each of the 25 Cerrado municipalities from 2008 to 2010 and the area cleared in the 2009–2010 period. The total area cleared is only 26 percent of that authorized, with 19 municipalities presenting lower total cleared areas than authorized. Total cleared area is much larger than authorized in only one of the municipalities, Palmeira do Piauí. This could be related to the land tenure situation because persons without land rights would not seek authorization to clear land.

Table 1. Area authorized for clearing and cleared from 2009 to 2010 for the 25 municipalities of the Piauí Cerrado region (km²)

Municipality	Municipality Area (km ²)	Authorized in 2008 (km ²)	Authorized in 2009 (km ²)	Authorized in 2010 (km ²)	Total Authorized (km ²)	Cleared in 2009-10 (km ²)
Alvorada do Gurguéia	2,131.1	-	-	1.0	1.0	1.3
Antônio Almeida	652.0	-	-	2.7	2.7	1.7
Baixa Grande do Ribeiro	7,808.8	45.8	440.5	423.8	910.0	394.3
Barreira do Piauí	2,029.1	-	-	104.2	104.2	
Bertolínia	1,225.2	-	-	-	-	3.0
Bom Jesus	5,468.4	15.1	129.5	99.3	243.8	24.4
Colônia do Gurguéia	430.3	-	0.3	-	0.3	-
Corrente	3,050.0	5.8	23.7	17.0	46.5	21.5
Cristino Castro	1,849.3	-	-	-	-	1.7
Currais	3,158.2	-	47.2	1.9	49.1	48.8
Eliseu Martins	1,091.1	-	-	55.9	55.9	0.4
Gilbués	3,494.5	-	-	39.4	39.4	14.3
Manoel Emídio	1,618.9	-	2.9	136.2	139.0	4.1
Marcos Parente	774.9	-	6.3	13.5	19.8	6.6
Monte Alegre do Piauí	2,417.9	52.7	30.5	11.5	94.7	19.7
Palmeira do Piauí	2,020.8	-	-	-	-	64.3
Parnaguá	3,284.3	62.2	22.7	20.2	105.2	6.1
Pavussu	1,478.4	-	-	-	-	2.3
Porto Alegre do Piauí	1,137.6	9.7	-	-	9.7	8.5
Redenção do Gurguéia	2,468.4	-	2.3	8.6	10.9	5.6

⁵⁰ Twenty-five Cerrado municipalities are legally defined in State Law 5.699 of 2010. One of them, Pavussu, will not be included in a proposed new law related to land tenure regularization. The overall area of the Cerrado biome in the state is 93,424 km², or 37% of the state's territory.

Municipality	Municipality Area (km²)	Authorized in 2008 (km²)	Authorized in 2009 (km²)	Authorized in 2010 (km²)	Total Authorized (km²)	Cleared in 2009-10 (km²)
Ribeiro Gonçalves	3,977.7	83.9	94.1	96.8	274.7	42.1
Santa Filomena	5,284.8	-	51.2	16.3	67.5	42.9
São Gonçalo do Gurguéia	1,384.6	2.6	-	-	2.6	2.8
Sebastião Leal	3,111.9		8.0	109.0	117.0	21.3
Uruçuí	8,453.6	290.8	328.8	549.0	1168.5	203.5
Total	69,801.6	568.4	1,187.9	1,705.9	3,462.3	941.1

Environmental challenges are not restricted to the Cerrado region; they affect all rural areas of the state, such as the proper use and management of rural landscapes (zoning); use of natural resources; adequate water supply, both in quantity and quality, to human animal populations in a sustainable manner, particularly in the semi-arid eastern regions of the state; and responsible management of existing water resources. Economic activities in rural areas have other environmental impacts, such as firewood collection, charcoal production, brick kilns, and the polluting effects of modern agriculture, which require limitation and control by the Government.

The GoP has recognized the magnitude of these challenges and has been building up its capacity to address them in a systematic manner. There is adequate federal and state legislation allowing control of economic activities and mitigation of their impact on the environment. The challenge for the GoP is the effective application and enforcement of such laws by monitoring actual land use, registering rural properties and their owners, licensing rural economic activities, enforcing compliance with license terms, and getting landholders to actually protect their declared reserves and to recover areas that have been cleared illegally.

There are about 221,000 operational holdings in Piauí, most of which would require at least one license for a specific economic activity, such as ranching or production of grains or cash crops. Since 2009, SEMAR has issued 1,145 licenses, many of which are for the same operation (licenses are issued in three phases: preliminary license, and licenses for installation and operation). The GoP is aware that the magnitude of this task requires substantial expansion of institutional capacity. The GoP has contracted civil servants with enforcement power through two official selection processes (*concursos*), bringing the effective force to 235 public servants, and will select an additional 30 in 2012⁵¹.

Ecological-Economic Zoning. As in many other countries, the occupation and use of urban space in Brazil is regulated by the Master Plan (*Plano Diretor*) of each municipality, as mandated by the Constitution. Since the adoption of the first environmental law in Brazil (Law of the National Environmental System, No. 6938, of 1981), the occupation and use of rural landscapes should also follow plans established through “Ecological-Economic Zoning (EEZ)”. It is expected to use technical and scientific knowledge and to be discussed democratically with civil society and the private sector. The underlying concept is that different tracts of the landscape have varying potential for the various uses (agriculture under various crops, grazing, and forests) and varying needs for conservation or even preservation. EEZ was first applied in Amazonian states, but is gradually being considered by other Brazilian states as well.

It is important to note that zoning, while eventually cast in form of a State law, is primarily directed at public agencies in matters of expansion of infrastructure, creation of conservation units, approval of institutional credit and the like. Zoning is normative, but it is not directly binding on the land owner as to what he can and cannot do on his land. Zoning may be used to guide the issue of licenses for economic activities on the land, but this has not been legally tested yet in Brazil. Moreover, zoning is not likely to

⁵¹ The process to select 6 of the 30 may occur still in 2011.

be used for guiding the location of Legal Reserve within a holding, as it operates at scales that are usually too small for this purpose. An important outcome of zoning would, however, be the indication of new areas to be protected for biodiversity conservation.

Decree 4,297 of 2002, which set the rules and procedures for EEZ, defined zoning as an instrument of the organization of the territory, which must be followed when plans, works and public activities are implemented. While EEZ is a responsibility of the Federal Government, specifically of the Ministry of the Environment (MMA), it should be carried out by state governments, which would then submit to the Federal Government for review and approval.

According to the Decree the EEZ:

- must establish measures and standards for environmental protection to ensure environmental quality of soil and water resources and conservation of biodiversity and also to guarantee the sustainable development and the improvement of the quality of life of the population.
- should take into account ecological importance, limitations and fragilities of ecosystems and establishes prohibitions, restrictions and alternative exploration of the territory.
- should have ample democratic participation, sharing responsibilities among public sector administration and civil society.
- aims at organizing, in an articulated manner, the decisions of public and private agents related to use of natural resources.
- seeks ecological, economic and social sustainability.
- values multidisciplinary scientific knowledge.

GoP has decided to execute the EEZ for the entire state (at scales of 1:1,000,000 to 1:100,000). As a basis, there is already macro-zoning of the Parnaíba River basin by the Federal Government and the Federal Development Corporation for the São Francisco and Parnaíba Rivers (CODEVASF) supported by PROAGUA, covering about 97 percent of the state. Given the environmental challenges mentioned above, the GoP's priority is the zoning for the Cerrado region, in greater detail than is available under macro-zoning (scales from 1:100,000 to 1:10,000). Piauí signed a Technical Cooperation Agreement with the GoB's Ministry of Environment (*Ministério do Meio Ambiente*, MMA) in 2009; this agreement remains in force. MMA furnishes data from its database, maps and satellite images for this effort, and provides funds that are complemented by state funds. As a result, the GoP has signed a contract with a consulting firm for diagnostic and prognostic zoning studies in ten Cerrado municipalities, covering some 45,200 km², with initial results expected in the first half of 2012. The work of the consulting firm will be followed by a technical working group in government, and will subsequently be submitted for discussion at public hearings in the relevant municipalities.

The GoP has issued a decree defining the process and institutional arrangements of the Economic-Ecological Zoning for the Cerrado, including an Inter-Institutional Coordination Committee for EEZ that includes representatives of the state government and its agencies, Federal Government agencies, state and federal attorneys' offices, civil society organizations, private sector associations, and academia. Committee members have already been nominated.

Zoning is expected to result eventually in state and/or municipal laws and to be used, among other things, to define new protected areas, identify environmentally critical or vulnerable land (where agricultural activities would not be licensed or would be restricted, and where grants and sales of public land would not be made), guide infrastructure investment decisions, and guide banks in the appraisal of applications for official credit for economic activities with an impact on landscape use.

Biodiversity Conservation. There are about 28,700 km² of protected areas in the state, equivalent to 11 percent of Piauí's territory. Of this total, about 13,800 km², or 5.5 percent of the territory, count as strictly protected areas; the remainder are areas of environmental protection areas (APAs), an extractive reserve,

a national forest and four private nature reserves (RPPN). The four national parks and two ecological stations (one federal, one state) constitute the strictly protected areas. Overall, protected areas tend to be located more in the semi-arid and northern regions of the state. The Cerrado biome has fewer protected areas, about 3,900 km². Creation of new protected areas in that biome awaits to use the results of the EEZ to identify suitable areas for new parks and reserves in that region. Two State protected areas are planned to be created in other regions of the State still in 2011 or in early 2012, with about 46 km² area.

Municipal environmental management. Under the Brazilian Constitution of 1988, environmental management foresees the participation of the three levels of government—federal, state and municipal—as a shared, common responsibility. This implies the decentralization of environmental management functions, such as licensing and monitoring, to municipalities, and thus an understanding among the three spheres of government as to the responsibilities of each. Few municipalities in Brazil are equipped to carry out their environmental management responsibilities. In Piauí, only the municipality of the capital city, Teresina, is sufficiently equipped and has the necessary human resources. The GoP is assisting the municipalities with the training of personnel for environmental management.

Municipalities can promote environmentally sustainable development in other ways, but may require incentives to do so. One of the instruments to provide this incentive is the Ecological Sales Tax (*ICMS Ecológico*) that has been already adopted by 14 states in Brazil, in one form or another. According to the Federal Constitution, the state sales tax (ICMS), which is a state's largest source of revenue, is shared between the state government (75 percent) and the state's municipalities (25 percent). At least 75 percent of the revenue that goes to a municipality must be shared in proportion to the sales volume of products and services in that municipality; the remainder can be shared in accordance with other criteria. In the case of Piauí, Law 5813 of December 2008 created a premium transfer of ICMS revenue to those municipalities that have been awarded the "Environmental Seal," a certificate recognizing municipalities that excel in environmental management. However, municipalities retain the right to their conventional shares of sales tax revenue.

The Environmental Seal can be obtained by municipalities in three categories (A, B and C), depending on their classification level in terms of management of the environment and of natural resources. To be classified as Category A, a municipality must have environmental management in accordance with the standards of sustainable development and conservation of biodiversity and natural resources, approaching what would be ideal in terms of the nine topics below, with effective measures to address/resolve at least six of them:

- solid waste management
- environmental education
- reduced deforestation; rehabilitation of degraded areas—reforestation
- reduced risk of burnings; conservation of soils, water and biodiversity
- protection of streams and rivers for public water supply
- identification of sources of atmospheric, sound and visual pollution, with the aim of minimizing them
- irregular buildings that do not comply with the norms of land use and occupation
- legal provisions regarding environmental conservation units in the municipality: indigenous communities, ecological stations, parks, forest reserves, and areas of relevant interest, in relation to federal, state or municipal laws
- legislation on municipal environmental policy, in accordance with local characteristics and in compliance with relevant federal and state legislation

To be classified as Category B, the municipality must demonstrate that it is on its way toward adequate environmental management, having regulated and functioning measures in at least four of the nine topics listed above, but still having some problems to resolve. Finally, the Category C seal is for municipalities

that have taken initial steps toward implementation of an adequate environmental policy, with measures adopted regarding at least three of the topics above. In all cases, the municipality must have a functioning Municipal Council for Environmental Defense. Forty percent of the revenue earmarked for the *ICMS Ecológico* goes to municipalities with Class A seals, 33 percent to those with Class B seals, and 27 percent to those with Class C seals. The State Secretariat for Environment and Water Resources (*Secretaria do Meio Ambiente e dos Recursos Hídricos do Estado do Piauí, SEMAR*) annually prepares a questionnaire concerning the nine topics above, for the municipalities interested in the seal to state the measures taken and results obtained. After technical analysis and field checks, the Secretariat issues the seal in the appropriate category. The evaluation will be repeated annually, so that municipalities may rise or fall in category, and new ones may attain the seal.

State Decree No. 14,348, dated December 13, 2010 established the rules of the premium ICMS transfers and introduced the guidelines of the Environmental Seal for municipalities that meet the criteria. An administrative act (*portaria*) was issued on February 9, 2011 creating the Committee for Environmental Performance Evaluation (*Comissão de Avaliação de Desempenho Ambiental- CADAM*). A Call for Qualification of Municipalities (*Edital de Habilitação e Postulação de Municípios para Fins de Recebimento do ICMS Ecológico*) issued by SEMAR in May 2011 has so far resulted in only four requests by municipalities to be qualified for the seal. The GoP is analyzing the reasons for the limited response, which may be linked to of municipal leaders' limited familiarity with the challenges and opportunities of environmental management and the advantages offered by the 2008 law.

Water Resource Management. Piauí is situated between the semi-arid Northeast and the humid Amazon regions, and thus experiences both extreme scarcity of surface water in its eastern portion and relative abundance of water in the rest of its territory, including the agriculturally important Cerrado region in the southwest. Rainfall is as high as 1,400 mm per year in the northern part of the state, and does not exceed 800 mm in the semi-arid region, with high levels of evapotranspiration. In the center-south, rainfall averages about 1,100 mm and the southwestern parts may reach up to 1,600 mm. All regions experience a marked dry season of four to five months' duration, and the resulting moisture deficit makes it necessary to use irrigation for growing crops in the dry season.

The state's overall water resources are estimated at about 19 billion m³, 94 percent of which are surface water and 6 percent are groundwater, or about 5,700 m³ per inhabitant per year. In the semi-arid region, however, water availability is on average less than 1,000 m³ per person/year, sufficient for human consumption but scarce for irrigation use.

Virtually the entire state lies in the Parnaíba River basin. The river forms the state's western boundary. The hydroelectric potential of the Parnaíba River is used by six power stations in its upper and middle reaches. Piauí has twenty major storage reservoirs; most of them in the semi-arid zone, and several new ones are planned or are already under construction. Furthermore, Piauí intends to augment water availability in the semi-arid region through trans-basin diversions from the São Francisco River.

Piauí also sits on a large reservoir of good-quality groundwater—more than half of the groundwater resources of the Northeast—in sedimentary aquifers, underlying even the semi-arid region of the state. Use of the groundwater and granting of water rights require more detailed technical information.

Piauí faces the following challenges in managing its water resources:

- Assuring adequate water availability for human and animal consumption in the semi-arid region
- Assuring quality of ground and surface waters for intended uses
- Regulating and controlling groundwater use, with clear, transparent allocation of water rights, particularly in the semi-arid and Cerrado regions with their rapidly developing irrigation
- Regulating the flow of the Parnaíba River and its tributaries, particularly the Gurguéia tributary in the south, to prevent or mitigate periodic flooding of large tracts of land
- Making the uses of river water compatible for irrigation, navigation and electricity generation

Since 2000, Piauí has had comprehensive legislation on water resource management (Law 5165), consistent with the national water legislation of 1997. Said law includes regulations on water rights, water resource planning, and water charges. Piauí also has a State Fund for Water Resources, a State Water Resources Council, and a State Water Resources Information System. SEMAR is the managing agency for water resources in the state.

The State Water Resources Plan was launched in December 2010. It contains an assessment of surface and groundwater resources in the state's twelve main watersheds and a forecast of likely water demands for human, animal and industrial consumption, irrigation, fisheries and tourism, to 2020 and 2030. The relationship among demand, available water and potential in each basin has been analyzed under different scenarios for additional water supply infrastructure (reservoirs, intra-basin and trans-basin transfers, wells, etc.). Only two small watersheds out of the twelve show a likely water deficit.

One of the key issues for water resource management is the lack of reliable information and proper assessments of water quality, which are essential to guide investment planning as well as policy reforms in this area. To address this issue, in 2008 the GoB launched the National Water Quality Evaluation Program (*Programa Nacional de Avaliação da Qualidade das Águas, PNQA*). The program is based on partnerships between the National Water Agency (*Agência Nacional de Águas, ANA*) and the states for which technical agreements are established in order to develop a national water quality monitoring system, standardize assessment criteria and procedures, and increase availability of water-quality information to the public. The GoP entered into a Technical Cooperation Agreement with ANA on April 25 2011 for the implementation of the PNQA in the state.

Under that agreement, SEMAR monitors water quality in accordance with national standards and guidelines and records state water-quality data in its own system (HIDRO), while ANA defines, jointly with SEMAR, the network of quality monitoring stations, and trains and assists state staff in carrying out the program. ANA has defined about 200 quality measurement sites, and has begun training state staff in measurement methodology. This work is key to providing basic information about the water quality in the state and to monitoring the implementation of the State Water Resources Plan.

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Rural Environmental Cadastre. The Brazilian Forest Code (Law No. 4,771 of 1965), which is currently under discussion again in the National Congress, merits special attention. It requires that private landholders set aside a certain portion of rural holdings as a “legal reserve,” i.e., keep it under its natural vegetation cover (whether forest or otherwise), and to preserve the natural vegetation in “permanent preservation areas” (PPA), such as gallery forests on river and stream banks, forests on steep slopes and mountaintops, and native vegetation around natural springs. The Forest Code generally stipulates a legal reserve of 20 percent of each holding, but this percentage is increased to 80 percent in the “Legal Amazon,” and to 35 percent of Cerrado lands in the Legal Amazon. In Piauí, the legal reserve is also 20 percent of a holding, but Law No. 5,699 of 2007 increased this to 30 percent for the state's Cerrado region.⁵² The location of the legal reserve and permanent preservation areas must be recorded by the landholder in the margin of official property registers held at notaries' offices (“*averbar em cartório*”), and in the Rural Environmental Registry, to be further discussed below.

⁵² Law 5.966 of 2010 defined a list of 25 Cerrado municipalities for the purpose of land regularization. The same list is being used in this report for other purposes.

The expansion of commercial crop agriculture and agro-industries in the state will necessarily result in an expansion of the suppression of native vegetation (“deforestation” for short, although Cerrado vegetation is only partly forest). Deforestation is not by itself illegal, but must be within the limits set by law and authorized by SEMAR. SEMAR has been issuing authorizations for deforestation since 2008. Prior to that year, this was the responsibility of the federal environment agency IBAMA. Such authorizations amounted to about 500,000 hectares in the entire state, of which about one half is in the 25 Cerrado municipalities. Suppression of native vegetation in these municipalities in 2009 and 2010 was 941 km², or about 1.4 percent of the territory,⁵³ whereas SEMAR had authorized 1,188 km² in 2009 and 839 km² in 2010. Actual deforestation thus appears to have been within the authorized limits.

Monitoring of actual land use and enforcement of the Forest Code requires that all land holdings and landholders be identified and registered. Landholders are required to “regularize” their holdings environmentally, that is, to bring their holdings into compliance with the law by removing “environmental liabilities” (violations of law). Federal Decree No. 7,029 of 2009 established the Program to Support the Environmental Regularization of Private Rural Holdings (the “*Mais Ambiente*” Program). To this end, it introduced the Rural Environmental Cadastre (*Cadastro Ambiental Rural, CAR*), defined as an electronic georeferencing system for identifying rural properties or occupied private landholdings, which delimits permanent preservation areas, legal reserve areas, and remaining areas of native vegetation in the holdings for control and monitoring purposes. CAR does not apply to indigenous land or public land (e.g., national and state parks, biological reserves).

Although registration in CAR is a voluntary act by the landholder, the law stipulates a three-year period for landholders to do so. Registration in CAR is a precondition for obtaining an environmental license for rural economic activity on the land, and for other authorizations and official purposes within a state’s environmental administration. Proper registration (within the first three years) and subsequent implementation of the rehabilitation plan causes any sanctions for violations of environmental law to be suspended and the holdings to be considered “regularized” (in compliance).⁵⁴ Failure to register and to carry out the commitment and rehabilitation plan will result in the application of the notifications, fines and punishments of law enforcement. On the other hand, CAR does not replace the need to register land with the National Cadastre of Rural Properties, does not constitute regularization of tenure, and does not represent an environmental license for any economic activities of the land.

Registration of a holding in the CAR of Piauí occurs at the initiative of the landholder, who in his or her application provides proof of title or of legal occupation and declares (i) the exact georeferenced boundaries of the holding, the location of remaining native plant cover, the location of the legal reserve, and the actual location of permanent preservation areas; and (ii) his/her adhesion and commitment to keep his or her land in compliance with environmental and forest law or to take actions to bring it into compliance (environmental regularization), as the case may be. To this effect, the landholder signs Terms of Commitment and Adherence (*Termo de Compromisso e Adesão, TCA*) and submits, where applicable, a Plan for Rehabilitation of Degraded Areas (*Plano de Recuperação de Área Degradada, PRAD*). The landholder is generally responsible for the cost of georeferenced maps and preparation of a PRAD. Simplified requirements apply to smallholders (with holdings of less than 100hectares) for whom SEMAR or another authorized agency provides the georeferenced drawings at no cost.

SEMAR examines the proposed location of the legal reserve under several aspects (social function of the property, zoning requirements, proximity to other legal reserves, basin water management plans, municipal zoning plans, etc.) and the permanent preservation areas identified, and reserves the right not to approve them. Approval allows the owner to declare the location the legal reserve in the public notary

⁵³ MMA: Monitoramento do Desmatamento nos Biomas Brasileiros por Satélite, Monitoramento do Bioma Cerrado 2009–2010, Agosto 2011

⁵⁴ This applies only to holdings where land clearing occurred before December 10, 2009, the date of the publication of the federal “*Mais Ambiente*” decree.

office (*cartório*). Land reform settlements may declare the legal reserve for each individual lot or for the entire settlement as a single group. The latter option is the one preferred in the law.

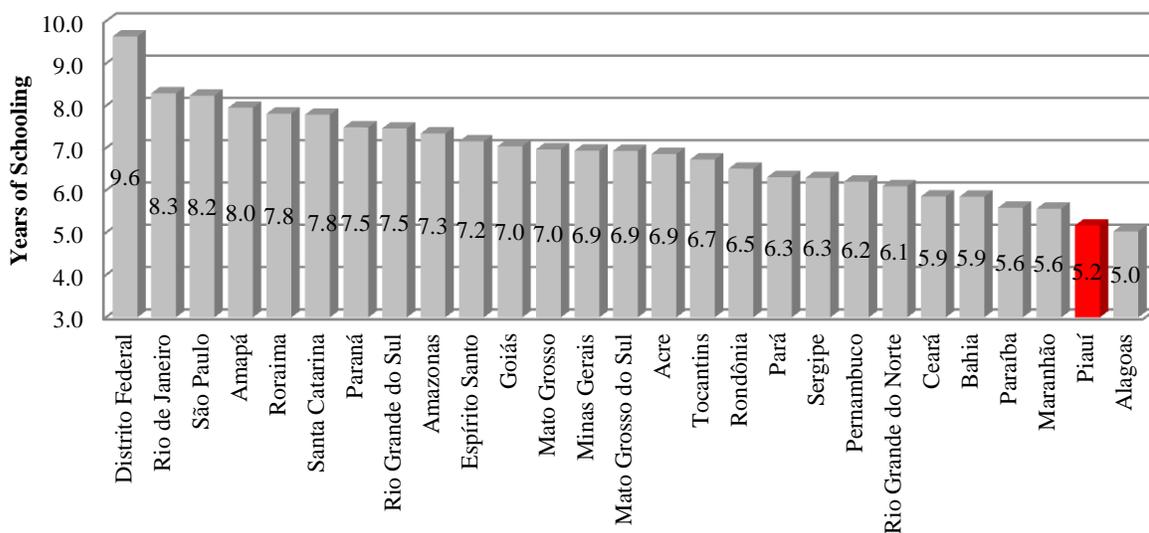
Law No. 6,127 2011 regarding the regularization of agricultural land occupation in the state (sub-objective A1.1) also reinforces the application of this Environmental Regularization Law. It stipulates that in order to receive or purchase the land, the occupant must present the registration in CAR.

The GoP has applied for inclusion in the Federal “*Mais Ambiente* Program”, and should receive federal support for the implementation of the CAR in the State. The Program for Environmental Regularization of Rural Properties is part of Piauí’s multi-year plan for 2012–2015.

Annex VIII: Overview of Piauí Education Policies

Piauí is one of the Brazilian states with a very low student performance, as measured by the national student assessment tests, as indicated by the Basic Education Development Index (*Índice de Desenvolvimento da Educação Básica*, IDEB). In recent years some progress has been made but this index still needs significant improvements, mainly in secondary education. The 2009 IDEB scores for Piauí's state schools in the 4th and 8th grades are 3.8 and 3.4, respectively, above the Northeast average (3.7 and 3.0) but still far below the national average (4.9 and 3.8). In the same year, the IDEB score for secondary education in Piauí was 2.7, the lowest in the country. Average years of schooling in the state is also very low (5.2 years of schooling) when compared with other Brazilian states, only a slightly better than Alagoas (5.0). (See Graphic 1)

Figure 1: Average Years of Schooling 2009



Repetition and dropout rates are also high. In the nine first years of basic education,⁵⁵ the repetition rate of 16.4 percent places the state behind only Service's rate of 23 percent. At this same education level, in 2009 the dropout rate of six percent was six times higher than those for São Paulo and Santa Catarina. In secondary education, the dropout rate is the greatest challenge: 22 percent of students at this level leave school and this rate is again the highest in the country.

The state's illiteracy rate (table 2) has been improving during the decade but is still high, with 23.4 percent of illiterate people aged 15 or older in 2009, when compared to the national illiteracy rate of 10 percent. It is the second-worst state rate, lower only than that of Alagoas (24.6 percent). This is a major impediment for social and economic inclusion of the poor. To resolve this issue, the Government is developing a major program in the 30 most vulnerable municipalities by supporting the literacy program in these areas. The Bolsa Família National Register (*Bolsa Família CadÚnico*) will be used to identify the most vulnerable groups that could be part of the literacy program, adopting the *Brasil Alfabetizado* model.

The GoP considers that improving the educational standard of its population is one of the most effective strategies for fighting poverty, with further impacts on increasing social and economic inclusion and generating income and employment. In addition, special attention is given to increasing the participation

⁵⁵ In the Brazilian education system basic education includes educação infantil,(0 to 3) preschool, fundamental education (*ensino fundamental*, grades 1 to 9) and secondary education.

of the youth of the most vulnerable groups in accessing quality education and in the process of decision-making on public policies as well as learning how to be better citizens.

Table 2 Illiteracy rate of persons aged 15 or older

	2002	2003	2004	2005	2006	2007	2008	2009
Brazil	11.8	11.5	11.2	10.9	10.2	9.9	10	9.7
Northeast	23.4	23.2	22.4	21.9	20.7	19.9	19.4	18.7
Piauí	29.6	28.4	27.3	27.4	26.2	23.4	24.3	23.4

Source: IBGE/Pesquisa Nacional por Amostra de Domicílios (PNAD)

Government's Strategy in Education -The state's education strategy includes priority actions focused on the following major goals: (i) improving the access to literacy programs and basic education opportunities for students with special needs and low-income youth and adults; (ii) improving the access to secondary education, including to vocational-technical programs through the implementation of distance-education strategies with the support of the Piauí Digital program; (iii) improving the education flow, and learning outcomes in both state and municipal schools, by provision of continuing education for teachers, implementation of accelerated programs to correct age-grade distortion and the provision of technical assistance to municipalities for applying education quality policies in the municipal education system; (iv) by (a) enhancing the selection process of school principals, and managers at the regional levels; (b) modernizing the monitoring system and implementing a State evaluation system to assess students and schools' performance.

To attain its objectives of improving access and quality of education in the state, the Government of Piauí has been following the Federal Government's program for 2008–2011, giving special emphasis on the preparation and implementation of the State Educational Development Plan (*Plano de Desenvolvimento da Educação*, PDE), which includes objectives such as improving the quality of primary education, and promoting learning achievement and student attendance.

The PDE is the central policy tool that forms part of a series of measures to improve the quality of education in Brazil. The PDE includes performance contracts between subnational governments and the Federal Government. As part of the contract, the subnational government (state or municipality) undertakes a commitment to improve the Basic Education Development Index (*Índice de Desenvolvimento da Educação Básica*, IDEB).⁵⁶ All non-discretionary federal assistance to the contracted state/municipality would be consolidated in support of a Coordinated Action Plan (*Plano de Ações Articuladas*, PAR). The PAR includes promises to implement educational policy measures to improve the IDEB for the state or municipality. Since the establishment of this instrument, which improves planning and coordination in the education sector, the State of Piauí has been signing the annual PAR and adheres to the commitment with the Federal Government, in which it promises to improve the quality of education in Piauí.

Literacy Program - Although the responsibility for basic education lies primarily with the municipalities, the GoP recognizes that to decrease the illiteracy rate in the state, a concerted effort is needed in the entire school system, be it state or municipal. In this regard, the *Brasil Alfabetizado* program implemented by both the state and the municipalities will receive improvements on knowledge content and in the monitoring of teachers and beneficiaries attendance to the program. Furthermore, the Government intends to provide incentives for both students and teachers to help the poor population to stay and finish the program. The intention is to avoid the high dropout rates of this program, motivate those enrolled in the program to be able to read and write, and consequently decrease the state's illiteracy rates.

Accessibility for the disable population- The Government also promotes access and socio-educational inclusion for youths and adults. The Government is creating the State Policy for Accessibility in Public Schools, and the adaptation of at least 28 schools with multifunctional resources. Coverage of the Education Policy for Youths and Adults (*Educação para Jovens e Adultos*, EJA) increased through the enrollment of at least 50,000 students.

Fighting repetition, dropout and age-grade distortion-the "repetition culture" as it is commonly called in Brazil permeates Piauí's education system. To improve the quality of education and fight the culture of repetition, which is very strong in the Brazilian education system, the GoP has been implementing the *Mais Educação* Program; program sponsored by MEC, which offers remedial learning, cultural and sports activities to students in basic education. Overwhelmingly, those who drop out are also those who repeated early years (additionally complicating schooling through age/grade distortion). For this reason, the key to success of basic education is to improve quality and decrease repetition in the lower grades. Several programs supported by well known education foundations⁵⁷ in Brazil are been implemented to minimize the age-grade distortion problems.

Improving access and quality of Secondary Education- the Government is adopting several policies to increase access to and improve the quality of this level of education. Access to secondary will significantly be increased through the implementation of the Piauí digital program. The Piauí digital broadband link will be available for free in public buildings and areas. The first phase is intended to link 43 municipalities. This program will support the provision of distance-learning strategies in school settings, including the provision academic and of technical-vocational secondary level courses for students in municipalities connected to the system. Approximately 40,000 new vacancies will be offered to new secondary students.

In addition, to increase the quality of secondary education in urban-marginal areas and municipalities where the IDEB needs substantial improvements, the Government is developing a program to offer full-time secondary education. The objective of the full-time secondary education is to improve the knowledge content of students in this level of education and reverse the situation of the secondary schools that in general are failing to provide the minimum skills necessary for active citizenship, let alone productive participation in a technology-based labor market. The dissemination of this model to other secondary schools in the state will be based on the results of this experience. At present, the program will be developed in 19 schools located in Teresina and selected municipalities.

Improving coordination with municipalities for improving quality of education in the public system. Piauí suffers problems of weak management and inadequate coordination between the State and the Municipalities. As in other parts of Brazil, the principal responsibility of the state-run education system is secondary, vocational and adult education (accounting for about 70 percent of enrollments at those levels). Enrollments in state-managed primary⁵⁸ schools are less than 19 percent of the total at that level, with municipalities being the main provider. Thus, issues of low learning performance and age-grade distortion in the state-run system are to some extent inherited from the poor-quality education provided by municipalities. The low IDEB of several municipalities in Piauí led the State Secretariat of Education and Culture (*Secretaria da Educação e Cultura do Piauí*, SEDUC), with the support of the Ministry of Education (*Ministério da Educação*, MEC), to establish mechanisms to provide technical assistance to the municipalities for the preparation of their respective PARs and the implementation of their education activities and policies. Priority was given to 91 municipalities with the lowest IDEB, and to the 155 municipalities where the population aged 15 or older has an illiteracy rate above 35 percent.

⁵⁷ Se liga and Acelera programs (for accelerating learning of students in the fundamental education level-grades 1 to 9) are being developed with the support of the Airton Senna Foundation and the Government is negotiating with the Roberto Marinho Foundation the implementation of accelerated programs for secondary over-age students.

⁵⁸ *Educação fundamental*: the first nine years of basic education.

Strengthening management at the central and school levels- The GoP recognizes that when management processes and resources are not aligned on student learning, student results are jeopardized. Unfortunately, it is frequently the case that when schools make efforts to improve quality themselves, many spend their scarce resources in fragmentary and ineffective ways. The Government new policies are exploring the possibility of introducing mechanisms and instruments for improving the management capacity at the central, regional and school level, and the use of results-based performance strategies. A merit-based system for selecting regional managers and school directors has been implemented and a State System of Evaluation has been established to assess students and schools' performance.

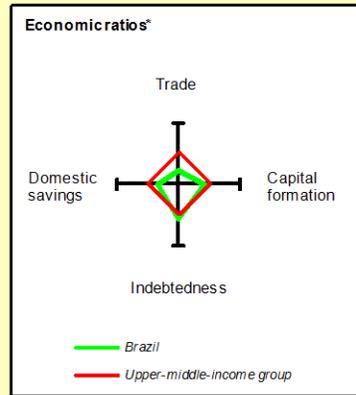
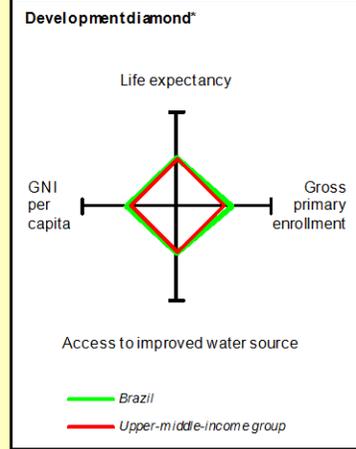
Annex IX: Country at a Glance

Brazil: Piauí Green Growth and Inclusion Development Policy Loan

Brazil at a glance

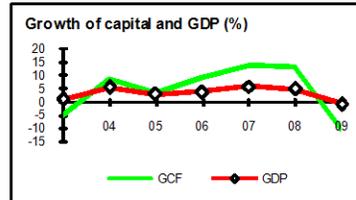
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	Brazil	Latin America & Carib.	Upper-middle-income		
POVERTY and SOCIAL					
2009					
Population, mid-year (millions)	193.7	573	1002		
GNI per capita (Atlas method, US\$)	8,070	6,993	7,495		
GNI (Atlas method, US\$ billions)	1,564.2	4,003	7,508		
Average annual growth, 2003-09					
Population (%)	11	12	0.9		
Labor force (%)	2.2	2.2	17		
Most recent estimate (latest year available, 2003-09)					
Poverty (% of population below national poverty line)	22		
Urban population (% of total population)	86	79	75		
Life expectancy at birth (years)	72	73	71		
Infant mortality (per 1000 live births)	17	19	19		
Child malnutrition (% of children under 5)	2	5	..		
Access to an improved water source (% of population)	97	93	95		
Literacy (% of population age 15+)	90	91	93		
Gross primary enrollment (% of school-age population)	127	116	111		
Male	132	118	111		
Female	123	114	110		
KEY ECONOMIC RATIOS and LONG-TERM TRENDS					
	1989	1999	2008	2009	
GDP (US\$ billions)	425.6	586.9	1652.6	1594.5	
Gross capital formation/GDP	26.9	16.4	20.7	16.5	
Exports of goods and services/GDP	8.9	9.4	13.7	11.1	
Gross domestic savings/GDP	30.4	15.0	20.9	16.5	
Gross national savings/GDP	35.8	12.1	18.7	14.7	
Current account balance/GDP	0.2	-4.3	-1.7	-1.5	
Interest payments/GDP	12	3.0	10	0.9	
Total debt/GDP	26.9	416	15.9	17.4	
Total debt service/exports	36.3	103.3	25.5	17.6	
Present value of debt/GDP	13.3	
Present value of debt/exports	103.7	
	1989-99	1999-09	2008	2009	2009-13
<i>(average annual growth)</i>					
GDP	2.4	3.5	5.2	-0.6	5.9
GDP per capita	0.9	2.2	4.1	-1.5	..
Exports of goods and services	5.5	7.6	0.5	-10.2	11.7

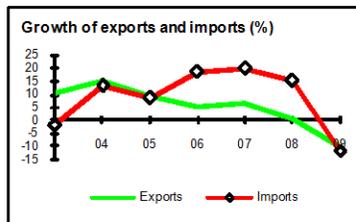


STRUCTURE of the ECONOMY

	1989	1999	2008	2009
<i>(% of GDP)</i>				
Agriculture	8.5	5.5	5.9	6.1
Industry	42.7	25.9	27.9	25.4
M manufacturing	29.5	16.1	16.6	16.8
Services	48.8	68.6	66.2	68.5
Household final consumption expenditure	54.1	64.7	58.9	61.7
General gov't final consumption expenditure	15.5	20.3	20.2	21.8
Imports of goods and services	5.5	10.8	13.5	11.2



	1989-99	1999-09	2008	2009
<i>(average annual growth)</i>				
Agriculture	3.0	3.8	6.1	-4.6
Industry	1.8	2.8	4.1	-6.7
M manufacturing	2.1	2.7	3.0	-8.2
Services	3.4	3.9	4.9	2.1
Household final consumption expenditure	4.0	3.5	6.8	0.2
General gov't final consumption expenditure	0.4	3.1	3.2	3.9
Gross capital formation	2.8	3.7	13.6	-10.3
Imports of goods and services	13.1	6.8	15.4	-11.5



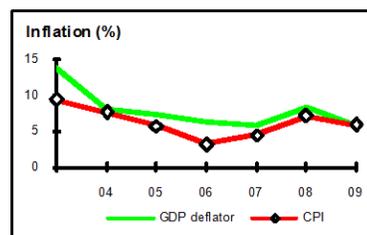
Note: 2009 data are preliminary estimates.

This table was produced from the Development Economics LDB database.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

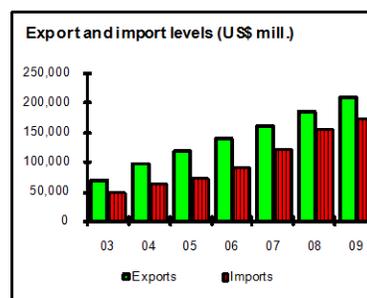
PRICES and GOVERNMENT FINANCE

	1989	1999	2008	2009
Domestic prices				
<i>(% change)</i>				
Consumer prices	1972.9	8.9	7.1	5.9
Implicit GDP deflator	1209.1	8.5	8.3	5.7
Government finance				
<i>(% of GDP, includes current grants)</i>				
Current revenue	-	19.8	23.6	23.2
Current budget balance	-	2.7	3.9	2.9
Overall surplus/deficit	208,202.5	-0.7	-0.4	-3.4



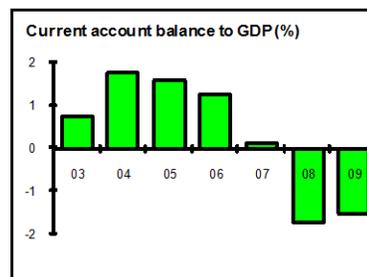
TRADE

	1989	1999	2008	2009
<i>(US\$ millions)</i>				
Total exports (fob)	32,975	47,551	184,216	208,178
Coffee	2,447	2,746	20,183	20,616
Soybeans	3,647	1,593	13,462	13,902
Manufactures	17,575	27,330	88,483	108,534
Total imports (cif)	18,263	49,210	155,475	172,782
Food	1,249	1,655	2,582	2,761
Fuel and energy	3,753	4,258	24,978	26,002
Capital goods	4,873	13,577	32,190	37,543
Export price index (2000=100)	86	93	128	124
Import price index (2000=100)	55	96	100	99
Terms of trade (2000=100)	157	97	127	125



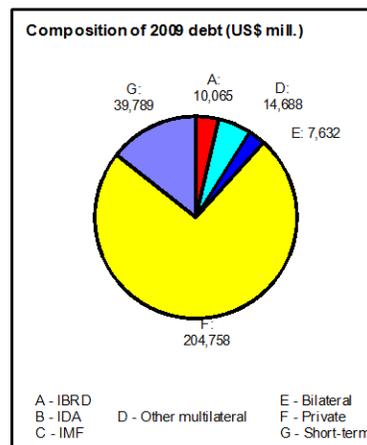
BALANCE of PAYMENTS

	1989	1999	2008	2009
<i>(US\$ millions)</i>				
Exports of goods and services	36,394	55,205	228,393	180,723
Imports of goods and services	21,486	63,382	220,247	174,679
Resource balance	14,908	-8,177	8,146	6,044
Net income	-13,265	-18,848	-40,562	-33,684
Net current transfers	249	1,689	4,224	3,338
Current account balance	1,032	-25,335	-28,192	-24,302
Financing items (net)	-146	17,513	31,161	70,953
Changes in net reserves	-886	7,822	-2,969	-46,651
Memo:				
Reserves including gold (US\$ millions)	9,679	36,342	216,881	273,123
Conversion rate (DEC, local/US\$)	100E-6	18	18	2.0



EXTERNAL DEBT and RESOURCE FLOWS

	1989	1999	2008	2009
<i>(US\$ millions)</i>				
Total debt outstanding and disbursed	114,356	244,108	262,139	276,932
IBRD	8,311	6,822	10,671	10,065
IDA	0	0	0	0
Total debt service	14,117	71,073	56,460	44,317
IBRD	1,475	1,380	1,310	2,231
IDA	0	0	0	0
Composition of net resource flows				
Official grants	44	65	211	196
Official creditors	235	380	1,962	3,438
Private creditors	-3,710	-11,130	27,250	23,842
Foreign direct investment (net inflows)	1,131	28,576	45,058	25,949
Portfolio equity (net inflows)	-57	2,572	-7,565	37,071
World Bank program				
Commitments	933	1,863	3,082	1,861
Disbursements	819	1,533	1,726	1,274
Principal repayments	871	952	812	1,872
Net flows	-52	580	914	-598
Interest payments	604	428	498	359
Net transfers	-656	152	416	-957



Note: This table was produced from the Development Economics LDB database.

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Annex X: References

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BRAZIL RURAL POVERTY REDUCTION PROJECT PIAUI

- REGIONAL OFFICES OF THE STATE TECHNICAL UNIT
- 600 AVERAGE ANNUAL RAINFALL IN MILLIMETERS
- CLIMATIC ZONES:
 - SEMI-ARID
REGIÃO DO SEMI-ARIDO
 - LOWER PARNAIBA RIVER VALLEY
REGIÃO DO MEDIO - BAIXO PARNAÍBA
 - SAVANNAH
REGIÃO DOS CERRADOS
- MAIN ROADS
- SELECTED CITIES AND TOWNS
- STATE CAPITAL
- STATE BOUNDARIES



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