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The World Bank

Report No: ICR1812

IMPLEMENTATION COMPLETION AND RESULTS REPORT  
(IBRD-72080 P060573)

ON A

LOAN

IN THE AMOUNT OF US\$ 60.0 MILLION

TO THE

STATE OF TOCANTINS, BRAZIL  
WITH THE GUARANTEE OF  
THE FEDERATIVE REPUBLIC OF BRAZIL

FOR A

TOCANTINS SUSTAINABLE REGIONAL DEVELOPMENT PROJECT

April 16, 2012

Finance, Private Sector and Infrastructure Department  
Brazil Country Management Unit  
Latin America and the Caribbean Region

## CURRENCY EQUIVALENTS

(Exchange Rate Effective February 14, 2012)

Currency Unit =  
BR\$ 1.00 = US\$ 0.5835  
US\$ 1.00 = BR\$ 1.7139

## FISCAL YEAR

## ABBREVIATIONS AND ACRONYMS

CONDER	Council of Regional Development
IE	Impact Evaluation
PDRS	Projeto de Desenvolvimento Regional Sustentavel (Tocantins Sustainable Regional Development Project)
PPA	Pluri-Annual Plan
SoT	State of Tocantins
UTR	Regional Technical Unit

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Country Director: Deborah L. Wetzel  
Sector Manager: Aurelio Menendez  
Project Team Leader: Eric Lancelot  
ICR Team Leader: Eric Lancelot

**BRAZIL**  
**Tocantins Sustainable Regional Development Project**

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## DATA SHEET

A. Basic Information			
Country:	Brazil	Project Name:	TOCANTINS SUSTAINABLE REGIONAL DEVELOPMENT PROJECT
Project ID:	P060573	L/C/TF Number(s):	IBRD-72080
ICR Date:	04/30/2012	ICR Type:	Core ICR
Lending Instrument:	SIM	Borrower:	STATE OF TOCANTINS
Original Total Commitment:	USD 60.00M	Disbursed Amount:	USD 60.00M
Revised Amount:	USD 60.00M		
<b>Environmental Category: A</b>			
<b>Implementing Agencies:</b> SEPLAN SEINF - TO DERTINS SEFAZ - Secretaria da Fazenda SRHMA			
<b>Cofinanciers and Other External Partners:</b>			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	04/12/2002	Effectiveness:	12/20/2004	12/20/2004
Appraisal:	11/04/2002	Restructuring(s):		08/13/2009 12/13/2010
Approval:	12/09/2003	Mid-term Review:	12/28/2007	11/14/2007
		Closing:	12/31/2009	10/31/2011

C. Ratings Summary	
<b>C.1 Performance Rating by ICR</b>	
Outcomes:	Moderately Satisfactory
Risk to Development Outcome:	Low or Negligible
Bank Performance:	Satisfactory
Borrower Performance:	Moderately Satisfactory

<b>C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)</b>			
<b>Bank</b>	<b>Ratings</b>	<b>Borrower</b>	<b>Ratings</b>
Quality at Entry:	Moderately Satisfactory	Government:	Moderately Satisfactory
Quality of Supervision:	Satisfactory	Implementing Agency/Agencies:	Satisfactory
<b>Overall Bank Performance:</b>	Satisfactory	<b>Overall Borrower Performance:</b>	Moderately Satisfactory

<b>C.3 Quality at Entry and Implementation Performance Indicators</b>			
<b>Implementation Performance</b>	<b>Indicators</b>	<b>QAG Assessments (if any)</b>	<b>Rating</b>
Potential Problem Project at any time (Yes/No):	No	Quality at Entry (QEA):	None
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Satisfactory		

<b>D. Sector and Theme Codes</b>		
	<b>Original</b>	<b>Actual</b>
<b>Sector Code (as % of total Bank financing)</b>		
Roads and highways	50	72
Sub-national government administration	50	28
<b>Theme Code (as % of total Bank financing)</b>		
Decentralization	13	
Environmental policies and institutions	24	17
Municipal governance and institution building	25	11
Participation and civic engagement	13	
Rural services and infrastructure	25	72

<b>E. Bank Staff</b>		
<b>Positions</b>	<b>At ICR</b>	<b>At Approval</b>
Vice President:	Hasan A. Tuluy	David de Ferranti
Country Director:	Deborah L. Wetzel	Vinod Thomas
Sector Manager:	Aurelio Menendez	Jose Luis Irigoyen
Project Team Leader:	Eric R. Lancelot	Aymeric-Albin Meyer
ICR Team Leader:	Eric R. Lancelot	
ICR Primary Author:		

## F. Results Framework Analysis

### Project Development Objectives (from Project Appraisal Document)

The project development objective is to contribute to raising living standards and to reducing inequalities and regional disparities by improving access to markets, job opportunities, infrastructure and social services for rural communities in Tocantins' poorest regions, while ensuring sustainable use of natural resources and the protection of fragile ecosystems.

### Revised Project Development Objectives (as approved by original approving authority)

#### (a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
<b>Indicator 1 :</b>	Increase in formation of social capital, as measured by the Community Participation Index			
Value quantitative or Qualitative)	n/a	n/a	n/a	Achieved. Membership in rural producers association increased, Ample participation to define municipal development agenda and road investment priority.
Date achieved	12/09/2003	12/31/2009	07/31/2011	07/31/2011
Comments (incl. % achievement)	Outcome positive in the SE:11 Rural producers Assoc grew from 35 to 43 members per assoc.North not positive: association # from 20 to 11, mmship from 90 to 72. 5-10% of pop joined partic process & decision on develop agenda & road interventions priorities			
<b>Indicator 2 :</b>	Increase in number of visits to health facilities and in school attendance			
Value quantitative or Qualitative)	n/a	n/a	n/a	Achieved. Access to all weather roads and the reduced travel time to health and educational facilities are proxies for number of visits to health facilities, a goal intended to measure improved transport accessibility.

Date achieved	12/09/2003	12/31/2009	07/31/2011	07/31/2011
Comments (incl. % achievement)	Southeast: all weather access: from 68% to 92%. Time to hospital: from 2h to 1h30. Improved access to education facilities: From 79% to 94%. Preschool from 29 to 27mins. North: from 52% to 61%. From 1h52min to 1h25min, from 70% to 66%, from 21 to 13 min			
<b>Indicator 3 :</b>	Increased share of cash crops in total agricultural production			
Value quantitative or Qualitative)	n/a	n/a	n/a	Achieved. Traded production destined to other municipalities is a proxy for increased share of cash crops in total production, a goal intended to measure increased ability to sell cash crops and income generation
Date achieved	12/09/2003	12/31/2009	07/31/2011	07/31/2011
Comments (incl. % achievement)	Southeast 18% of production destined to other municipalities post Project vs 7% before. In the North, 100% of traded production destined to other municipalities post Project vs 26% before. Production refers to general products not only crops			
<b>Indicator 4 :</b>	Decreased price (incl. transport cost component) of key commodities and inputs			
Value quantitative or Qualitative)	n/a	n/a	n/a	n/a
Date achieved	12/09/2003	12/31/2009	07/31/2011	07/31/2011
Comments (incl. % achievement)	No value available at ICR			
<b>Indicator 5 :</b>	Decrease in time needed to get to municipal and regional centers			
Value quantitative or Qualitative)	n/a	n/a	n/a	Achieved. Distance to reach municipal & regional center is a proxy for time needed to reach centers, a goal intended to measure improved transport conditions as well as decrease in time to reach health and education centers. Results focus on elimination o
Date achieved	12/09/2003	12/31/2009	07/31/2011	07/31/2011
Comments (incl. % achievement)	SE:km to municipal center decreased 38.5 to 22.5.North: decreased 18.5 to 10. Results focus on eliminatng critical spots by constructing bridges and			



achievement)	culverts.From 2h to 1h30 & from 29 to 27m-North, from 1h52 to 1h25, and 21 to 13m-SE, to hospital & school
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**(b) Intermediate Outcome Indicator(s)**

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
<b>Indicator 1 :</b>	Number of finalized municipal development agenda prepared by MDFs			
Value (quantitative or Qualitative)		20 by end 2003, 40 by end 2005, 60 by end 2007		67
Date achieved		12/31/2009		10/31/2011
Comments (incl. % achievement)	Target achieved. The endorsement of this activity has been unanimous and all municipalities have carried out this valuable exercise. Goal for sustainability achieved			
<b>Indicator 2 :</b>	Number of pilot CONDERS established			
Value (quantitative or Qualitative)		2 by end 2005, 4 by end 2006		4
Date achieved		12/31/2009		10/31/2011
Comments (incl. % achievement)	Target achieved. Sudeste & Nordeste created such instances and Jalapao & Bico already had similar structures prepared by Government.			
<b>Indicator 3 :</b>	Number of regional development agenda finalized			
Value (quantitative or Qualitative)		1 by end 2006 4 by end 2008		4
Date achieved		12/31/2009		10/31/2011
Comments (incl. % achievement)	Target achieved, despite the novelty of the process to establish regional development agendas, leading to delays. New State Development Agenda (PPA) based on a series of 9 regional development agendas.			
<b>Indicator 4 :</b>	Number of UTRs established			
Value (quantitative or Qualitative)		2 by end 2004 4 by end 2006		4
Date achieved		12/31/2009		10/31/2011
Comments (incl. % achievement)	Target achieved, and despite delays, all technical units are operational. New PPA envisages deepening deconcentration of administration into the regions, strengthening the role of the UTRs. Goal for sustainability achieved.			
<b>Indicator 5 :</b>	Number of inter-municipal consortia created			
Value (quantitative or Qualitative)		1 by end 2005, 4 by end 2008		0
Date achieved		12/31/2009		10/31/2011
Comments (incl. % achievement)	Target not met. In hindsight, consortia creation in Project timeframe was ambitious. This innovative approach remains relevant and, under recently			

achievement)	improved legal & institutional framework,creation of consortia should gain more traction under new operation		
<b>Indicator 6 :</b>	Increase in number of municipalities presenting annual statements conforming accounting standards and the requirements of the Law on Fiscal Responsibility		
Value (quantitative or Qualitative)	20% by end 2005, 30% by end 2008		100%
Date achieved	12/31/2009		10/31/2011
Comments (incl. % achievement)	Target exceeded. The indicator measured capacity building and increased technical knowledge at municipalities		
<b>Indicator 7 :</b>	State planning system strengthened by end 2008		
Value (quantitative or Qualitative)	---		Yes
Date achieved	12/31/2009		10/31/2011
Comments (incl. % achievement)	Target achieved. Project contributed to such improvement by providing specific consulting support eg. defining the State PPA and Strategy, a number of training to the staff in monitoring & evaluation and public administration		
<b>Indicator 8 :</b>	Number of regional zonings ready		
Value (quantitative or Qualitative)	3 by end 2005, 6 by end 2008		4
Date achieved	12/31/2009		10/31/2011
Comments (incl. % achievement)	Target partially met:more than 50% met,including 1 geographic & 3 thematic zoning.Target would have been fully met if had more time.New operation will finance an integrated territorial management plan (TOR prepared) covering all regions and themes		
<b>Indicator 9 :</b>	Number of protected areas to be established by end 2008		
Value (quantitative or Qualitative)	6		0 All preparatory activities to create 18 protected areas finalized
Date achieved	12/31/2009		10/31/2011
Comments (incl. % achievement)	Target partially met:prep activities of 3x more areas than targets(18vs.6)finalized;establishment of areas underway,pending long process of consultation &community mobilization,political decision,&handling social issue to manage stakeholders' expectations		
<b>Indicator 10 :</b>	Land use management tools approved and in use by end 2008		
Value (quantitative or Qualitative)	n/a		3 operational Instruments prepared
Date achieved	12/31/2009		10/31/2011
Comments (incl. % achievement)	Target met:tools included satellite images & maps,and 2 master plans(land use & coverage changes, & forest inventory)in support to State territorial management in environment conservation,expansion of productive activities (agribusiness) &carbon footprint		
<b>Indicator 11 :</b>	85% of the critical points on the main municipal road networks eliminated by		

	end 2008		
Value (quantitative or Qualitative)		85%	95%
Date achieved		12/31/2009	10/31/2011
Comments (incl. % achievement)	Target exceeded. 95% of the envisioned works have been undertaken, with works finalized in 62 of the 67 municipalities. Borrower is committed to finalize the works in the remaining municipalities after project end		
<b>Indicator 12 :</b>	Traffic on improved connecting roads increased 15% by end 2008		
Value (quantitative or Qualitative)		15% increase	200 (15% annually)
Date achieved		12/31/2009	10/31/2011
Comments (incl. % achievement)	Target achieved. Between 1999 and 2009, VDM increased on average 15% per year on connecting roads. Between 2009 and 2010 it continued growing at 13% on average. Compounding the above annual growth, the value between 2003 and 2008 is 200% on average		
<b>Indicator 13 :</b>	120 km of connecting roads improved by end 2008		
Value (quantitative or Qualitative)		120km	143km
Date achieved		12/31/2009	10/31/2011
Comments (incl. % achievement)	Target achieved. Improvements have consisted in works to prepare roads for paving by eliminating critical spots (such as narrow bridges) and rehabilitation of roads.		
<b>Indicator 14 :</b>	DERTINS planning, operations, and monitoring capacity strengthened by end 2007		
Value (quantitative or Qualitative)		n/a	yes
Date achieved		12/31/2009	10/31/2011
Comments (incl. % achievement)	Target achieved. Several initiatives undertaken during the Project to support improved planning, operation and monitoring capacity (road & condition traffic studies, creation of a pavement management, training)		
<b>Indicator 15 :</b>	2 pilot output-based maintenance contracts on 1,000 km of state and 1,000 of municipal networks signed by end 2006		
Value (quantitative or Qualitative)		2 pilot contracts	0 Progress on adoption of modality as endorsed by 3 governments and new loan incorporates output based contracts on more than 1/3 of network.
Date achieved		12/31/2009	10/31/2011

Comments (incl. % achievement)	Target not achieved. Sustained Bank engagement allowed agency adoption of performance based mnngt approach by Project end & State envisions more than 1/3 paved network with output-based maintenance (CREMA) by mid 2013, operationalized in Bank new operation
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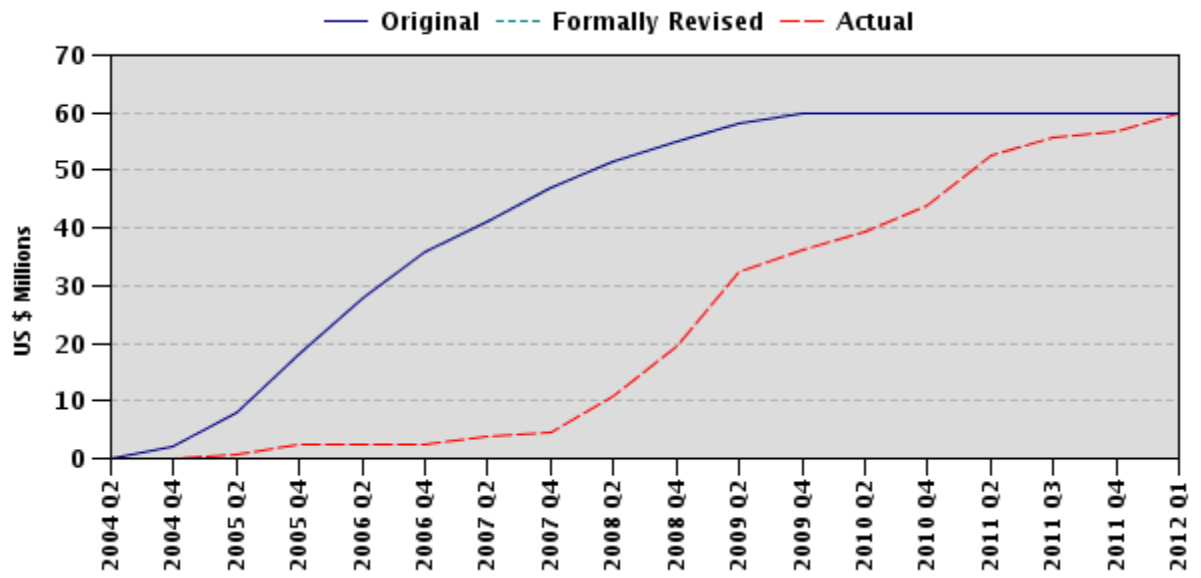
### G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	03/16/2004	Satisfactory	Satisfactory	0.00
2	11/16/2004	Satisfactory	Satisfactory	0.00
3	11/29/2004	Satisfactory	Satisfactory	0.00
4	05/04/2005	Satisfactory	Satisfactory	0.60
5	09/16/2005	Moderately Satisfactory	Moderately Satisfactory	2.60
6	01/20/2006	Moderately Satisfactory	Moderately Satisfactory	2.60
7	06/12/2006	Moderately Satisfactory	Moderately Satisfactory	2.60
8	12/04/2006	Moderately Satisfactory	Moderately Satisfactory	2.84
9	02/13/2007	Moderately Satisfactory	Moderately Unsatisfactory	3.68
10	09/11/2007	Moderately Satisfactory	Moderately Unsatisfactory	7.35
11	12/04/2007	Moderately Satisfactory	Moderately Satisfactory	8.86
12	06/04/2008	Satisfactory	Moderately Satisfactory	17.47
13	11/25/2008	Satisfactory	Moderately Satisfactory	30.24
14	04/08/2009	Satisfactory	Moderately Satisfactory	34.21
15	11/14/2009	Satisfactory	Moderately Satisfactory	38.09
16	06/21/2010	Satisfactory	Moderately Satisfactory	43.99
17	02/11/2011	Satisfactory	Moderately Satisfactory	55.56
18	07/29/2011	Satisfactory	Moderately Satisfactory	56.87

### H. Restructuring (if any)

Restructuring Date(s)	Board Approved PDO Change	ISR Ratings at Restructuring		Amount Disbursed at Restructuring in USD millions	Reason for Restructuring & Key Changes Made
		DO	IP		
08/13/2009	N	S	MS	38.09	12 months extension of the closing date to allow improved implementation of the Project
12/13/2010	N	S	MS	52.68	2nd extension of 10 months to the closing date to allow full implementation of the Project

## I. Disbursement Profile





# 1. Project Context, Development Objectives and Design

## 1.1 Context at Appraisal

*General characteristics* The State of Tocantins (SoT) is the most recent State in Brazil created under the 1988 constitution when it split from the northern half of the former State of Goiás. Located in the Center-North of Brazil, in the *Cerrado*<sup>1</sup> biome (87% of the state), it has a tropical climate with pronounced seasonality marked by a dry season from May through October. With an area of 277,621 km<sup>2</sup> and a population of 1.38 million (2010), the state density is low (4.98 hab/km<sup>2</sup>).

*Tocantins' socioeconomic context at appraisal* Despite a dynamic economy characterized by high growth rates, its GDP per capita was below the national average. As a result, while the situation had been progressively improving since the State's creation, the SoT was still among the poorest states in Brazil in terms of number of poor relative to total population in 2000. The State's 2000 Municipal Human Development Index (IDH-M) was estimated at 0.72, below Brazil's average (0.76). Poverty was worse in rural areas, with 68% of the rural population living under the poverty line. Finally, the SoT social context was marked by the presence of two vulnerable segments of the rural poor, indigenous people and the Quilombolas<sup>2</sup>.

*SoT and Bank partnership* The Project followed a successfully-concluded operation, initiated at an early stage of the State's creation. This first operation had mainly focused on constructing the State's main road networks in accompaniment to the recent creation of the State. The maturation of the partnership towards a deeper engagement with a State, characterized by more complex needs, led towards a more encompassing and complex operation focusing on regional sustainable development.

*Bank strategy at appraisal* The Project was approved by the Board in late 2003, a period which coincided with the transition from the 2000-2003 to 2004-2007 Country Assistance Strategies for Brazil. The Project rationale was aligned to the new strategy: it was adopting an integrated approach, focusing simultaneously on economic and social fronts through a regional development operation while fostering environmental protection and sustainability as well as generation of employment opportunities for the poor.

## 1.2 Original Project Development Objectives (PDO) and Key Indicators

The *project development objective* was to contribute to raising living standards and to reducing inequalities and regional disparities by improving access to markets, job opportunities, infrastructure and social services for rural communities in Tocantins'

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<sup>1</sup> The Cerrado biome is characterized by savanna formations crossed by gallery forests and stream valleys. It is one of the most biodiverse savannas in the world, including a mosaic of ecosystems with 23 types of vegetation consisting mostly of tropical savannas woodland, grasslands and forests.

<sup>2</sup> A Quilombola is a resident of a Quilombo in Brazil. Quilombolas are descendents from slaves who fled far within the territories, until abolition in Brazil in 1888.

poorest regions, while ensuring sustainable use of natural resources and the protection of fragile ecosystems.

The key performance indicators, as indicated in the PAD main text, consisted of a selection from the rich evaluation framework (see details in Chapter 3 and Annex 2 of the ICR)– the PAD’s outcome and output indicators:

- Increase in social capital formation;
- Number of visits to health facilities and school attendance;
- Share of cash crops in total agricultural production;
- Price and transport cost of selected commodities and inputs;
- Travel time to municipal and regional centers;
- Numbers of Municipal Development Fora established and operational,
- Numbers of satisfactory regional and municipal development plans or agenda prepared;
- Total area of established state environmental conservation units;

### **1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification**

No revision of the PDO or the key indicators took place.

### **1.4 Main Beneficiaries**

The Project’s target population was comprised of the rural communities (about 300,000 people) established in the four poorest regions on the Eastern end of the SoT: Bico de Papagaio, Jalapao, Sudeste and Nordeste. These four regions, which together make up half of the State’s area, were characterized by scarce and remote settlements. Half of the municipalities of those regions were, at the time of appraisal, among the lowest-IDH municipalities in the State.

The Project targeted these remote and poor populations, seeking to improve their accessibility to markets, job opportunities and social services, by interventions on the municipal road network to enable year round transit. Additionally, the Project was also expected to foster empowerment of those populations in the local development agenda through the adoption of participatory mechanisms to define municipal priorities for development and investments.

In a broader perspective, the entire population of the State was expected to benefit indirectly from the Project, which was designed to foster regional development in an environmentally sustainable manner, as well as to strengthen State administration management and planning capacity, in complement to the Project’s local development activities.

### **1.5 Original Components**

The project was structured along the following three components:



- 1. A participatory planning and management of regional and municipal development component (US\$6.5 million)**, to: (a) establish and strengthen mechanisms for local civil society participation; (b) set-up, in each region of the project, regional units of the Planning Secretariat (SEPLAN) to support the local and regional planning and management capacity; and (c) strengthen the state's capacity to undertake multi-sectoral state-level planning, administer public programs and monitor/evaluate the performance of such programs.
- 2. An environmental management component (US\$10.2 million)**, to: (a) strengthen the state's land management capacity; (b) consolidate the state's environmental protection system; and (c) support the regulation and promotion of sustainable land use.
- 3. A rural transport improvement component (US\$42.7 million)**, to: (a) strengthen the state's road management capacity; (b) define in a participatory fashion and improve, to all-weather condition, about 6,000 km of priority road sections of the main municipal road networks and improve about 120 km of high-priority state feeder roads; (c) promote cost-effective rural transport services; and (d) provide support to the project coordination unit.

The first and third components were expected to contribute directly to the PDO. Indeed, under the first component, activities fostering participation – with the ultimate goals of empowering the local population and building social capital together with activities strengthening the State administration capacity towards development at the State-wide level – were expected to contribute to raising living standards of rural communities in Tocantins' poorest areas. The third component, for which prioritization was decided in a participatory fashion, was expected to act as a catalyst for the development of the target population, by making municipal accesses all-weather/all-year round passable, thus improving accessibility to markets, job opportunities and social services.

The combination of two successive participatory processes – to define the local development agenda and to prioritize investments on the municipal roads – was designed as a two-step empowerment mechanism. First, the population would be involved in defining the general municipal management organization and development agenda. This was expected to help make those populations active players in the definition of their development priorities. Second, the same population would translate particular aspects of the abovementioned agenda into very concrete and immediate actions (road improvements), which in turn would contribute to the local development agenda. Moreover, it was expected to bring transparency in the allocation of resources within each municipality, as investments were envisaged to be coherent with the recently adopted development agenda.

The second component was also expected to contribute to the PDO by creating a sustainable framework for the State's regional development through land use management and biodiversity protection that would foster a regionally balanced and socially and environmentally sustainable development of the State.

## **1.6 Revised Components**

No revision of project components took place.

## **1.7 Other significant changes**

The Project underwent two restructurings. The first restructuring was approved on August 13, 2009, extending the closing date by one year, until December 31, 2010 and including a new beneficiary, the Finance Secretariat-(SEFAZ), with no change to the PDO nor to the Project description. The second restructuring was approved on December 16, 2010, extending the closing date an additional 10 months, until October 31, 2011.

## **2. Key Factors Affecting Implementation and Outcomes**

### **2.1 Project Preparation, Design and Quality at Entry**

*Soundness of background analysis.* Background analysis informing Project preparation is considered to have been appropriate and critical to effective Project design. Bank presence within the State, nearly since its creation, had enabled it to acquire thorough knowledge of sector needs and to establish a long-term partnership with the SoT. In the initial phases of the State's creation, Bank collaboration focused on construction of trunk infrastructure through the Second State Highway Management Project (1994-1999), in line with the significant needs of a newly created State. However, as the State's capacity strengthened and its development agenda became more comprehensive, the Bank's approach evolved and in the Project subject to the present ICR, aimed at focusing on infrastructure investments as a catalyst for economic growth and local development to reduce regional disparities and contribute to the alleviation of poverty. This close familiarity with the State's development agenda and the extended partnership with the Bank explain the comprehensive nature of Project design, which was customized to accommodate the SoT's evolving and more complex needs. Finally, specific studies and evaluations undertaken during Project preparation, including cost benefit analysis and evaluations of institutional and fiduciary capacity at the state level, among others, also provided further analytical basis for Project design.

*Assessment of Project design.* The Project design was based on a solid assessment of the issues at hand and provided a sound response to the development challenges of the State. In addition, the Project was structured through a comprehensive approach that departed from the traditional model of transport operations. The latter was characterized by a strong predominance of road investments, both in terms of project activities and allocation of funds, and technical assistance and institutional strengthening components often represented limited activities. As a precursor to multi-sector operations, the Project design was innovative with a more balanced approach, dedicating only half of Project funds to road investments while making the institutional strengthening and policy support component a central piece of Project design and fostering its effective execution through a strong allocation of Loan proceeds to these activities (the cost sharing arrangement provided for 84% Bank financing for institutional strengthening activities, against 50 to 60% for the work components).

Institutional strengthening activities and investments were designed in an articulated fashion to serve the Project's goal for sustainable regional development and created a well-rounded program: empowered populations and strengthened local economic development, strengthen environment policy and management capacity, improved access for competitiveness and social development. The implementation tools were comprehensive and customized to the Project needs, as illustrated by the ample use of participatory decision. Innovative and efficient approach to the issue of local accessibility was designed with a focus on the elimination of critical spots through the building of bridges and culverts, a well customized solution to the situation of the State, where floods often represent a challenge for transport during the rainy season. This low cost and low maintenance solutions allowed improving close to 6,000 km or roads with limited resources. Moreover, the method of implementation of these works by combining standardized technology in the production of bridge decks, with a labor intensive approach to execute the bridges' supports and the culverts, further increased efficiency of the program while generating temporal employment opportunities at the local level further benefiting the local economic tissue.

In terms of implementation, the variety of activities included under the Project implied that multiple institutions and stakeholders were directly or indirectly involved in Project implementation: several State Secretariats and agencies (e.g. environment agency Naturatins), State administrations de-concentrated in the regions, 67 municipalities, diverse communities, etc. However, the Project was designed to ensure an important level of centralization in the implementation process, with one Project Implementation Unit in charge of all fiduciary processes which simplified implementation and increased the quality of execution (in the case of the works in the municipalities). As a result, the institutional set-up was responsive to Project needs and effective in ensuring that resources were adequately allocated and used.

With hindsight, it appears that implementation challenges increased as a result of the wide scope of the Project's design, particularly given the overall limited amount allocated to the Project (US\$100 million, out of which US\$60 million from the Bank loan), and the large contribution expected of the State (40%) in a context of limited available resources at the State level (financial, human resources, capacity etc.). The large number of activities - over 200 – could have resulted in a piecemeal approach that could have put at risk the ability to result in substantial impact. From both the Client and the Bank's perspectives, the multi sector design had made Project management an energy-intensive task, involving various sectors, a situation further compounded by the procurement packaging, which involved often one procurement process (systematically prior reviewed) per activity.

Finally, the Project M&E included a comprehensive Results Framework, and a customized Impact Evaluation (IE). The Results Framework, while following particular usual practices at that time on many aspects (structure, nature of output indicators etc.), was also innovative and complex to reflect the muti-sector nature of the Project. As a result, it displayed some shortcomings, such as: (i) indicators and impact evaluation not defined in full harmony, (ii) lack of availability of data to monitor some indicators, (iii) too ambitious scope of some indicators' objective. The IE was based on a pilot

experiences in other contemporary operations. It was a particular effort to improve Project M&E and a rare and innovative tool for transport operations. The preliminary assessment of the IE by the ICR team revealed a pertinent tool to objectively assess the Project outcome through the use of relevant proxies. Beyond, this preliminary assessment is expected to be completed by a more thorough Bank research paper to further exploit the results of this IE<sup>3</sup>, which is seen as an opportunity to contribute to enhance Bank understanding of rural transport projects' transformational impacts. Details on the Results Framework are further elaborated in Section 3.2.

*Government commitment.* Government commitment varied during project preparation and implementation, mostly as a function of changing political cycles. Notwithstanding such variations, commitment shown by technical teams within the Government was sustained throughout implementation and proved critical to its effective execution, particularly considering the complexity and energy-intensive nature of the Project supervision. The importance of ensuring political commitment for such a Project could not be understated, especially given the heightened need for coordination and consensus building in this type of multi-sector type operation.

*Assessment of risks.* During preparation, a series of risks were identified as reflected in the risk matrix of the PAD. Risk assessment was overall well grounded at the time of appraisal. Major foreseen risks, related to fluctuating Government commitment, lack of coordination among different players and lack of availability of counterpart funds, effectively materialized during Project implementation. Likewise, the mitigation measures were appropriately assessed and proved effective when the risks materialized. In addition, some unforeseen risks also materialized, including the financial crisis and the impeachment of the State's Governor in 2009, both having had strong repercussions on overall Project implementation.

Finally, the social, environmental, and fiduciary aspects of the Project have been adequately addressed overall. In particular, detailed analysis was conducted for potential environmental and social impacts during Project preparation. Environmental guidelines were in place and adequately implemented. No resettlement took place. With hindsight, the Project could have improved its a priori assessment on the feasibility of particular activities within the timeframe of a Bank operation (e.g. creation of conservation areas) since such activities involve a lengthy process of mobilizing broad social commitment and may also entail some land acquisition.

## **2.2. Implementation**

*Initial Delays.* The implementation of this Project was challenging in many ways, but ultimately successful. The first stages of Project implementation were characterized by important delays, part of which were the result of administrative delays (the PDRS, approved on December 9, 2003, only became effective one year later, on December 20,

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<sup>3</sup> The DEC/LAC-SD funded study is expected to further assess the IE results to better identify impact on local development of rural transport projects.

2004). Initial preparatory activities were slow to start, mostly as the result of a slow take-over of the newly elected Government. While the Project first activities effectively started with Project effectiveness, this did not translate immediately with a take-off of the disbursement as a result of: (i) the nature of the Project implied lengthy preparatory activities, including various consultations processes widespread over a large territory with poor accesses, which were time consuming; (ii) the geographic dispersion of works throughout the State resulted in a long process to prepare works designs (67 participative consultations on prioritizing road investments in a State the size of England with low accessibility, often without paved road access, then preparation of project designs of 4000 critical spots including 700 bridges in very remote areas with overall 67 tendering documents for works); (iii) the nature of the works, which implied multiple small contracts (67 contracts averaging only US\$0.65 million each) and increased the burden in terms of procurement processes (consulting, non-consulting, goods contracts and some additional works contracts had amounted to a staggering 220 processes overall); and (iv) the nature and timing of the political cycle, vis-a-vis the Project cycle (the change in Governor from preparation to implementation) and the time needed for the new Government to fully integrate the potential benefits of the Project activities.

***Take off, with some fluctuation in implementation.*** In 2007, the Project saw a remarkable pick-up in its disbursement rate. From December 2007 to December 2008 one third of the total amount of the Loan was disbursed. Since its take-off, overall Project implementation was characterized by some degree of fluctuation due to foreseen events, such as the interruption of works during the rainy season which spans over 6 months per year and difficulty to manage multiple contracts at a time, as well as some unexpected circumstances, such as shortfalls in the allocation of counterpart leading to delays in the payment of contracts. Two additional and unforeseen factors contributed to severely impact Project execution and resulted in a deceleration of implementation in 2009: (i) financial constraints imposed on the State budget as a result of the international financial crisis, and (ii) the general slowdown in the State's public administration following the impeachment of the Governor in June 2009. The new Government was elected in September 2009 for a short 15-months period (electoral cycle imposed new elections in October 2010), further compounding the difficulty to obtain a strong commitment to the Project's objective as a result of the short term mandate of the new government. Overall, this process of political transition and cycle added to the difficulty of mobilizing counterpart funds and delayed Project implementation. Fortunately, the new Government elected in 2010 strongly embraced the Project and its rapid and deep commitment towards the Project objectives allowed the completion of Project activities and more successful outcomes.

***Project restructuring.*** Initial delays and fluctuations in Project implementation explain the need for two extensions to the Project's closing date, which ultimately allowed the Project to fully disburse and meet its development objectives. The first extension was granted in August 2009, extending the closing date by one year, until December 31, 2010. This restructuring also included minor adjustments to the loan amount distribution, with the objective of optimizing resource allocation in relation to needs, making use of the unallocated category which constituted 11.5% of the loan amount. The second extension was granted on December 16, 2010, extending the closing date by an additional 10

months, until October 31, 2011. This second extension allowed the Project to take advantage of the dry period, enabling to substantially advance with physical works.

## **2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization**

### **Monitoring design**

The design of a monitoring system to assess the PDO achievement is based on two distinct tools: (i) the **Results Framework**, established in the PAD; and (ii) a complementary ex-post **Impact Evaluation** undertaken by the Client.

**Results Framework.** The Project's Results Framework was an attempt to reflect the Project complexity. It was also designed at a stage when the Bank had not yet defined a standardized approach towards monitoring and evaluation. However, its implementation and utilization have posed several challenges. First, the attempt to reflect the Project's comprehensiveness resulted in the design of a complex three levels monitoring tool aimed at measuring Project overall impact (the said "sector indicators", see below), outcome and outputs. Second, with hindsight, the choice of specific indicators may not have always been the most appropriate: some indicators were lacking an appropriate definition and were hard to measure, others did not have a defined baseline, others were hardly measurable, some did not have obvious causality with the outcome or output they were expected to measure, or were too ambitious.

In particular, the Project had an original first category of indicators, denominated "**Sector Indicators**," classified under the category "CAS-related goals". These indicators presented some shortcomings such as lack of appropriate definition, no baseline or target values, inaccurate articulation with project timeline (e.g. the indicators measured on a 10-year frequency in Brazil), and limited or inexistent causality between the Project and the indicator. In practice, the pertinence of the inclusion of such indicators in the result framework remains unclear as these indicators could hardly be measured and were not Project related. The main shortcoming of the "**Outcome indicators**" was, with the hindsight, the miss opportunity of a better definition to more fully take advantage of the Project Impact Evaluation. Finally, while "**Output indicators**" represented pragmatic and easily measurable indicators, during monitoring several indicators did not appropriately capture the Project's expected benefits, and in several cases, the indicators' targets were overly optimistic.

To overcome those difficulties when assessing the Project results at ICR preparation, the project team proposed suitable quantifiable proxies from the Project Impact Evaluation (see below). In cases where the indicator was not met, progress towards achieving the indicator was described. A detailed assessment of achievement of each indicator and evaluation of the respective pertinence of the indicator is provided in annex 2.

**Impact Evaluation** (IE). The Project benefited from an impact evaluation based on the previous experience of rural development projects (ie. the Rural Alleviation Projects of the Northeast of Brazil and the Impact Evaluation of the Vietnam Transport Project). The

IE was envisioned as an exercise to better establish causal links between the Project's interventions and outcomes/outputs.

The IE has been carried out through two separate surveys, administered to reflect the before and after treatment situations, and targeted at both household and local community levels. The first survey was carried out prior to the start of works (2003 and 2005) to establish the baseline. These surveys had been conducted with 1492 households in beneficiary municipalities and with 14 community associations in all the four Project regions. The 'after-treatment' survey was carried out at Project closure in July 2011, establishing the final assessment for two of the four regions works had been concluded at that time, representing 1005 households and 11 communities<sup>4</sup>. Based on abovementioned previous experiences, the surveys were structured along 10 main topics (general characteristics, education, health, employment, resources and availability, domestic production activities, credit, community activities, transport, living standards). The after treatment survey was further complemented with qualitative questions on perceptions of the Project's impact among beneficiaries.

### **Monitoring implementation**

The Borrower was responsible for the implementation of the M&E subcomponent and the Impact Evaluation, with satisfactory results. The tasks were concentrated in the hands of a number of specialists contracted by the Project. With hindsight, more could have been done to institutionalize monitoring and evaluation practices within the State and strengthen their capacity.

### **Monitoring utilization**

The M&E framework was intended to provide a feedback loop to improve Project operations. A midterm review was planned to evaluate the efficiency of the Project in reaching its objectives with the plan to modify, if deemed necessary, the design of certain Project components and/or mechanisms in place. The Project midterm review did not end up revising the indicators which were not measurable at that time partly because delays in starting Project implementation meant only few activities had been undertaken at that point. The undertaking of the Project's Impact Evaluation by the State of Tocantins is considered an important accomplishment. In particular, the evaluation is expected to provide valuable information to inform the preparation of new operations within the State and Brazil. It is also expected to benefit the Bank as part of its knowledge creation and dissemination agenda as few impact evaluations are on-the-shelf available for transport projects.

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<sup>4</sup> The after treatment evaluation was limited to two regions as works only begun in the two other regions only some months before Project closure and it was assessed that an evaluation at that point in time would not have provided sufficient time for households to acquire benefits of works. It is worth noting that the IE should be complemented by new surveys on the remaining regions in July 2012. Final and complementary evaluation of the IE is expected to be provided after the completion of the ICR. Likewise, the detailed analysis of the IE by both the Borrower and the Bank was underway at completion of the ICR.

## 2.4 Safeguard and Fiduciary Compliance

Environmental Assessment and Natural Habitats: The Project was rated as a Category 'A'.

Environmental safeguards were handled in a satisfactory manner by the Client. The monitoring and evaluation of environmental impacts were carried out by the Road Agency (DERTINS)'s environmental team in collaboration with Environmental Agency (NATURATINS). Monitoring of environmental impacts by DERTINS was thorough and ensured good quality and overall environmental compliance with Bank safeguard requirements.

Environmental externalities from civil works consisted mostly in small and localized impacts on vegetation, soil and water course and temporary associated inconveniences during the works phase of culverts and bridges construction. While the Project works stop and go's during implementation may have prolonged the timeframe of the expected environmental impacts in cases, such impacts have remained limited in time and geographic spread.

By improving the conditions of transport and fostering local development, notably in agriculture, the Project may have triggered changes in the patterns of agricultural production in the immediate vicinity of rural roads. Such changes may, in turn, have had cumulative impacts on natural habitats and land use which might prolong in the future. However, while the degree of this impact is hard to assess at this point, it can be noted that (i) areas involved in changes in agriculture patterns have generally remained limited (3 to 5 km from the improved road), and (ii) the Project had environment protection as an integral part of Project design to enhance sustainability, through a specific project component dedicated to optimize land use management (in a sustainable fashion) and strengthen the State's environmental protection system (see more detailed assessment in section 3.2).

In terms of the Project's handling of social safeguards, an evaluation was undertaken in 2010, concluding that: (i) participatory selection processes for prioritization of works have been an important achievement for the State in terms of fostering social inclusion; (ii) no involuntary resettlement or land acquisition were required throughout the Project; and (iii) no indigenous people were affected by the Project's investments.

Fiduciary compliance was also satisfactory, despite the extended number of contracts (over 200) handled under the Project and the multiple challenges encountered in terms of procurement throughout implementation. As mentioned above, this was a time-consuming and human resources-intensive exercise both for the Client and Bank supervision team (all processes were reviewed a priori). With hindsight, the aggregation of procurement processes in a fewer number of packages, when feasible and pertinent, could have been implemented. This option was however rejected by the Client during Project execution as it had adapted its structure and capacity and felt that this method had proved to provide good results. From a Financial Management perspective, the change in physical localization of the Implementing agency in the last 10 months of Project



implementation, following the new Government election, resulted in a temporary partial disorganization of the Project archives which was resolved by the Project end.

## **2.5 Post-completion Operation/Next Phase**

The sustainability of actions undertaken under this operation is supported by the principles underlying Project design, which has been entrenched in the Borrower's operational processes, even beyond the scope of the Project (see section 4 for a review of project sustainability) and the Project successful implementation: a decentralized, bottom up approach to investment and development planning in support to local development.

From a political economy perspective, the Project has supported activities aimed at improving accessibility of low income populations in lagging regions whose increase in living standards, in turn, is expected to contribute to the State welfare. The Project strengthened local development efforts, including through populations' empowerment mechanisms to establish municipal development agendas and their subsequent road investment prioritization. From a social and civil perspective, it also contributed to durably improve access to social service for the target rural populations. Finally, the Project supported the creation of decentralized technical units in the regions with the specific objective to further empower populations, identify opportunities of development and strengthen local production capacity. Those units are in operation.

From an infrastructure management perspective, the selected nature of works on municipal roads, consisting in low maintenance infrastructures, provided for sustainable improved accessibility of rural populations. Although pilot CREMA were not implemented, this contract modality was adopted by the road administration by Project end, with endorsement by three successive governors and will now be widely applied to the state main road network. The regional technical units of the road administrations, which have traditionally undertaken municipal road maintenance, have been strengthened. Sustainable improved road management practices is also evidenced through the road agency's recognition of the prime importance of road maintenance (against a focus on construction in the past), and the development of support tools such as: the set up of a road management system, road condition evaluations (undertaken by the agency) and traffic evaluations (including the implementation of automatic traffic counters), and various training in road management.

As an expression of commitment to these principles, the Government of Tocantins has requested a follow-on operation which builds upon the accomplishments of PDRS. The proposed Tocantins Integrated Sustainable Regional Development Project (PDRIS) is a US\$375 million operation (including a US\$300 million Bank loan) and will tentatively include two broad components: (i) physical works component including improvements to transport conditions in the State, under an integrated approach, targeting both capillary municipal roads for improved accessibility (like under the present operation) and State feeder roads (with a strengthened support to road maintenance), articulating interventions with trunk national transport networks; and (ii) an institutional strengthening component seeking to improve the quality of public services, including the modernization of State administration (SEPLAM), improvements in local and regional production systems

(SEAGRO) and improvements in environmental management (SEMADS) in prolongation to the present operation, as well as increased quality of the State's education system (SEDUC). Building on lessons learnt from the Project, the execution of this new larger operation has been carefully planned with strengthened implementing unit, more operational constraints for particular disbursements (e.g. investments in municipalities conditioned to the participation to an intermunicipal consortium) and a longer timeframe (6 years). For example, particular attention was given to the procurement plan, combining activities as possible to limit the number of processes. Likewise, counterpart's financing will focus on activities less subject to changes in political commitment, such as paving works, while rehabilitation works, fully undertaken with CREMA, will be 100% financed by the Bank and more flexibility in the implementation of the institutional financing activities will be granted.

### **3. Assessment of Outcomes**

#### **3.1 Relevance of Objectives, Design and Implementation**

**Rating:** Substantial relevance.

Relevance of the Project objectives is rated high. The Project objectives remain consistent with current State and country priorities, as well as Bank assistance strategies:

- Project objectives remain very relevant in the context of the strategic pillars in the previous CPS (2008-2011) and in the present CPS (2012-2015). Under the previous CPS, the Project targeted increased efforts towards an equitable, sustainable and competitive Brazil, with a focus on populations at the bottom of the pyramid, providing access to basic services and investing in frontier regions with high concentrations of poverty. Likewise, the Project remains particularly relevant in the context of the new 2012-2015 CPS which is structured around four strategic objectives: (1) Increase the volume and productivity of public and private investments; (2) Improve quality and expand provision of public services for low income households; (3) Promote regional economic development through strategic investments and policies; and (4) Improve sustainable natural resource management and climate resilience. The project development objective and activities address the second and fourth CPS objectives - which will remain vital to promote Brazil's continued social and economic development by means of enhancing equity and expanding opportunities but also by emphasizing environmental sustainability. The Project also touches upon the other two strategic objectives, preparing the way for further capacity-building and investments;
- Project objectives also remain relevant considering the strategic direction being adopted by the State of Tocantins as reflected in the State's Pluri-Annual Plan (PPA) for 2012-2015. While the first PPAs were focused on building core infrastructure given the relative remoteness of the State and the existence of lagging regions, more recent PPAs have progressively evolved towards supporting a more encompassing, well balanced and integrated development vision. The three pillars for current PPA are based on the increase of Tocantins' contribution to the national GDP through regional deconcentration, the promotion

of social inclusion by reducing poverty and inequality and the guarantee of environmental sustainability. All three strategic pillars are central to the PDRS's objectives.

The new Bank operation in Tocantins (PDRIS) is also a testament to the continued relevance of the Project's objectives, design and implementation, given that in several aspects the new operation builds on the achievements and lessons learnt under the closing Project. Both projects are well-articulated, with the new operation acting as an opportunity to go a step beyond in the sustained accompaniment of the Bank to Tocantins's sustainable development, while still tackling several of the same challenges. Despite modifications in the scope and outreach of the new Project, the fact that many of the underlying principles remain unchanged indicates that the PDRS, as designed and implemented, has remained particularly relevant over the years and that many of its priorities remain relevant.

The Project design is assessed as overall moderately relevant. On one side, the richness and diversity of complementary Project components largely contributed to the Project success and in fact, the Project prefigured other multi sector projects that have since then been developed in Brazil. A number of tools prepared at design were also very relevant, such as the Impact Evaluation (which followed cutting edge experience in the Bank at that time) embedded in the Project, a practice still highly relevant as of today. Centralizing Project implementation in a Project Management Unit was also a good solution to appropriately undertake the Project numerous activities. On the other hand, the degree of complexity of the Project design might have had an impact on implementation delays and dispersing the Borrower's efforts – for a newly created State still consolidating its capacity – among a large number of components could have had a negative impact on Project outcome (a situation which eventually did not occur and the Project was successful). Finally, as previously mentioned, the design of the Result Framework, while being a laudable attempt to reflect the Project comprehensiveness, revealed some shortcomings.

### **3.2 Achievement of Project Development Objectives**

#### **Overall Rating:** Moderately Satisfactory

The achievement of Project Development Objectives is rated moderately satisfactory. On the one hand, the Project has undoubtedly positively contributed to raising living standards and to reducing inequalities and regional disparities by improving access to markets, job opportunities, infrastructure and social services for rural communities in Tocantins' poorest regions, while ensuring sustainable use of natural resources and the protection of fragile ecosystems. On the other hand, despite the significant achievements on the ground, some of which exceeded initial targets and expectations, not all targets of the initially formulated results indicators were fully achieved, which in reality is a reflection of a complex results framework that was not fully adapted to the needs of the project.

More specifically, the Project has been successful in: (i) adopting an integrated approach in which transport serves as a platform for transformation of the communities' local

development; (ii) adopting a bottom-up approach to foster rural communities empowerment in local development through participatory planning; (iii) promoting better social inclusion and enhanced appropriation of economic opportunities through accompanying measures to local development initiatives; (iii) fostering the state management capacity in environment to ensure the sustainable use of natural resources and the protection of fragile ecosystems (see details below); (iv) promoting a strong ownership of the Project by final beneficiaries and State counterparts, beyond political agendas, leading to perspectives of continued engagement beyond the actual Project.

The achievement of the PDO is demonstrated by the assessment from the Project M&E where: most project outcome targets as defined by the result framework were achieved, and when they are not, this was mostly due to shortcomings in the definition of the indicator (see detailed analysis in Annex 2) though significant progress was achieved on those targets, and initial results from the IE confirmed the achievement of the project development objectives (as the Results Framework did not include specific PDO indicators). The IE and community based surveys are also detailed in Annex 2.

The 1<sup>st</sup> component, ***participatory planning and management of regional and municipal development***, was by and large successfully achieved (6 out of 7 indicators achieved). Although this component had the smallest allocation (US\$6.5 million), it funded a large number of activities such as municipal development agendas, CONDERs, regional development agendas, UTRs, increased number of municipalities presenting annual statements in conformity with standards, and strengthened planning system, all participating to the component's objective.

Empowering rural poor populations through participatory mechanisms is a significant outcome of this project, highlighting mechanisms to incentivize peoples' deliberation on their municipal development agendas and for them to prioritize investments on municipal roads. It is a tool that provides legitimacy to investment decisions, and ensures sustainability of planning programs. It is also a means to strengthen rural poor in their citizenship belonging, including rights and responsibilities. This exercise determined works that improved accessibility to employment opportunities, schools, and services (including social services) for some of the poorest in Tocantins. The Project also supported specific pilot activities to support inclusiveness by fostering support to particular fragile and remote populations such as *Quilombolas*, fostering the development of new activities such as ecotourism in remote municipalities with potential, etc (see Section 6 Lessons Learned for further information).

The 2<sup>nd</sup> component, ***environmental management***, was overall substantially achieved (1 indicator achieved, 2 partially achieved), as it supported numerous activities and achieved results in the different areas covered by the component, as well as supported activities in areas beyond the scope defined in the project description:

- a) in land management capacity, the Client had carried out 4 zonings, including 3 thematic and 1 geographic, which establish measures for sustainable development, including economic development activities in respect of environment and natural resources protection, as well as biodiversity conservation. In support of the above zoning, the Project also contributed to

- strengthen the State's land management capacity through various studies, capacity training, equipment including cars, hydrometeorological stations, and a light plane extending monitoring to inaccessible areas. Further work on territorial management policies is expected in the proposed follow-on operation utilizing the above zoning studies with a integrated territorial development and management perspective (TOR already prepared);
- b) in environment protection, the Project supported the development of the State policy on biodiversity. In fact, in coordination with the GEF Cerrado Project to provide more weight to the conservation activities, the Project strengthened the State policy of environmental protection planning and supervision capacity through numerous studies on the State fauna and flora, program of biodiversity conservation, preparatory work for legislation for the protection of fauna and formulation of a State policy on fishing, thus, preparatory work for three times (18) the number of protected areas as envisaged in the Project<sup>5</sup>. The Project also supported the structuring of the State policy on water resources management through financing the State Water Master Plan, a Hydro-geological Water Resources Master Plan and river water flow studies, and then operationalized recommendations through five river basin action plans and through creation of basin management committees;
  - c) the Project supported the acquisition of satellite images and maps as well as instruments within 2 masterplan studies (land use and coverage changes, and forest inventory) for territorial planning and management. The studies a) identified environmental & socioeconomic factors that cause land usage changes, b) helped define strategic agribusiness, industrialization investments and clean development policies regarding carbon footprint, and (c) laid the ground for an integrated territorial management and sustainable development.

The overall impacts of these support activities, on biodiversity, water resource management, and territorial management are: a) helped the State recognize the environment not only for its intrinsic values but also as an asset that supports quality of life for citizens and offers economic opportunities, such as the development of ecotourism, b) granted tools that assure the sustainability of good management practices of the environment, and c) supported integration of environmental concerns into transport operations and factor in direct and cumulative impacts of growth, given the nature of a multi-sector operation (this Project's integration of environmental concerns into transport operations is considered a best practice referenced in Bank Report 44163 "Mainstreaming Conservation in Infrastructure Projects, Cases Study from Latin America" Juan D Quintero).

The 3<sup>rd</sup> project component, *rural transport improvement*, was by and large successfully achieved (4 of 5 indicators achieved). Both in terms of physical outputs and capacity building, this component exceeded its objectives to eliminate critical spots on the municipal road networks (95% against 85%), increase traffic on improved roads (x2 in 5

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<sup>5</sup> Timing for effective creation of protected areas in Brazil is in fact not compatible with the timing of a Project, often close to several decades.

years), improve roads (144 km against 120 km) and traffic conditions, and strengthen transport planning capacity. Despite being a compelling modality, output-based rehabilitation and maintenance contracts were not implemented, but introduction of this modality is a long term effort and requires continuous political commitment. It finally gained momentum in Tocantins as a result of extensive dialogue on its merits in terms of efficiency and transparency. These long term efforts have been paying off as illustrated by the endorsement of this contractual modality as the management tool for the main road network.

### 3.3 Efficiency

An ex-post economic analysis was conducted following appraisal methodology. It is focused on the investment component<sup>6</sup>, including construction of bridges and culverts on non-paved municipal roads and follows a producer surplus assessment approach.

In order to assess variations in the estimated economic returns over the 9-year preparation and implementation cycle, the ex-post evaluation computed benefit and cost based on: (i) pre- and post-Project historical agricultural productions, (ii) updated production forecasts, (iii) updated unit values of benefit and cost parameters, and (iv) final Project implementation costs. The resulting Economic Internal Rate of Return (EIRR) and Net Present Value (NPV) are shown in the below table (full details are presented in Annex 3).

	EIRR	NPV
ICR	20.2%	R\$ 27.5
Appraisal	18.5%	R\$ 42.1

Overall, the ex-post economic evaluation shows satisfactory results. The ICR-stage EIRR is estimated as 20.2%, which is higher than the appraisal estimate. Though the NPV decreased from R\$42.1 million to R\$27.5 million, it is concluded that investments made under the component remain economically justified. One of the major factors leading to this change was the delay in Project implementation. At appraisal, the construction works were expected to be completed in 4 years, having actually taken 7 years to conclude. The longer-than-expected construction period delayed the generation of producer surplus and as a result, the total surplus was reduced. However, this did not affect the EIRR substantially because the delay also led to lower costs in terms of present value.

Another major update was robust growth in the total value of agriculture productions. Both the area of production and productivity (tonnage per hectare) as well as the unit value of production significantly increased during the past 9 years. For example, the value of soy-bean production had grown 5 times from 2001 to 2009, even after excluding inflation contribution. Finally, the appreciation of the exchange rate, vis a vis the dollar resulted in a slight reduction in the number of kilometers intervened under the Project (from 5,670km to 5,121km), reducing the overall area of influence of the Project by

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<sup>6</sup> while the Project institutional strengthening was very efficient, these investments finally accounted for 71 percent of the total expenditures under the Project

approximately 10%. However, the strong growth in terms of production considerably offsets this downside effect.

### **3.4 Justification of Overall Outcome Rating**

Rating: Moderately Satisfactory

The overall outcome rating of moderately satisfactory is based on the following:

- Achievement of project development objectives substantiated by solid results for most Key Performance Indicators and outputs and positive assessment from the IE;
- achieving important advances in terms of state-wide environmental policy, as well as environment management and capacity;
- economic and financial efficiency;
- Survey-based evidence of physical quality of investments, and improved living standards especially as a result of increased accessibility;
- project benefits from physical infrastructure targeting large populations of poorest rural communities;
- innovative tools partially implemented and others still under consideration impacting positively sustainability of project results.
- Continued and substantial relevance of project design largely adopted in new operation.
- Continued relevance of project outputs of physical investments, goods, studies and training
- Project investments exceeding by close to 15% Project initial value, fully funded by the counterpart, due to the number of activities financed and Project success.

This rating takes into account the non achievement of some outputs (these were later replaced by other activities to achieve outcomes), and the initial delay in implementation as a result of slow administrative processing and the extensive preparatory activities needed before works, including large consultations processes, and which ultimately resulted in a closing date extension of 22 months to achieve the project outcomes. Such minor shortcomings aside, the Project has resulted in important outcomes in terms of improving the rural population's access to markets, job opportunities, infrastructure and social services, as well as in terms of creating an important foundation in terms of environmental sustainability.

### **3.5 Overarching Themes, Other Outcomes and Impacts**

#### **(a) Poverty Impacts, Gender Aspects, and Social Development**

In addition to the impacts already covered in previous paragraphs, this part reviews additional efforts to assess the Project and build lessons for future operations.

**Job creation:** A survey has been carried out by the Road Agency (DERTINS) on 27 private firms contracted for civil works. These surveys were intended to bring knowledge on the employment impacts of the Project's civil interventions. This survey estimated that

around 2600 official jobs were created, of which 84% were local and regional jobs (55% beneficiary municipalities and 29% in neighboring municipalities) and 16% were jobs generated in the firms' headquarters. The duration of these job assignments varied between 4 to 8 months in the field and between 6 to 10 months in headquarters.

An interesting result aggregating the total number of employees per municipality shows that the four municipalities benefiting most in terms of employment generation were Palmas, Porto Nacional, Palmeiras do TO and Colméia, where the headquarters of these companies are located.

**Gender:** The initial Project design did not envisage gender-specific activities; however the Project implementation has fostered a gender-sensitive approach during its different phases, for example, female participation during consultation processes on municipal development and investment prioritization. Impact Evaluation surveys, carried out in July 2011, included gender-specific questions (quantitative and qualitative) to ensure gender-insightful findings on project outcomes. Survey results on health and education show gap in accessibility to services between genders has diminished and increased female employment following project completion (25% female homemakers pre-project, 12% post-project).

#### **4. Assessment of Risk to Development Outcome**

Rating: Risk to development outcome is considered low, with moderate impact.

*At State level*, the special nature of the Project, which brings together different sectors and multiple stakeholders, made political commitment and strong decision making key determinants of Project success. This explains the enhanced impact of political cycles on Project performance throughout the implementation phase, reflected in ups and downs in the level of political commitment towards the Project. However, after years of implementation, overall support for the Project's broader concept and its underlying policies have become entrenched at State level and that State officials now acknowledge the benefits to decentralization, to the strengthening of municipal administrations and to the empowerment of local populations, making the risk of policy reversal unlikely. Looking forward, and considering that the nature of the proposed new operation also makes it vulnerable to political cycles, Project design included specific mechanisms (such as long term contracts, customized financing, and realistic implementation timeframes, among others), in order to mitigate potential impacts arising from political changes and to ensure sustained ownership at the highest political levels (see also Section 6 Lessons Learned).

*At Municipal level*, commitment has also proven to be critical to Project sustainability. By design, the Project targeted the State level and the local level, working directly with Project beneficiaries, bypassing the municipal jurisdiction, with no sufficient concrete actions in terms of capacity building being directed towards the municipal administration. In practice, it has become apparent that municipal buy-in is also critical to effective implementation and that the terms of the relationship between the State and participating municipalities need to be better defined and formalized. With hindsight, while



endorsement of the Program by the Municipalities has been total<sup>7</sup>, the PDRS could have better designed mechanisms to enforce responsibilities acquired by beneficiary Municipalities and

*At community level*, commitment and engagement of beneficiary populations can also play an important role in attaining and safeguarding the Project's development objectives. In the initial stages of Project implementation, the participatory, bottom-up approach adopted by the Project was extremely successful in terms of engaging local populations in planning processes and fostering ownership of the local development agendas among beneficiary populations. Mechanisms included under Project design to ensure the sustainability of this social empowerment, such as follow-on regional development initiatives and other instruments put in place to give continuity to the participatory approach beyond the planning stage, might in particular cases, have fallen short of their original objectives, with some notable cases of success. Overall, however, community and people participation to the State development agenda has been durably strengthened as illustrated by the preparation of the State new PPA, which was based on ample regional consultations.

*On a technical level*, the nature of works being undertaken under the Project is a guarantee by itself of the sustainability of the investments. By focusing on the elimination of critical spots, through the construction of concrete hydraulic structures (bridges, culverts, etc.) to provide year round access to local populations, this technical solution minimizes the need for maintenance, increasing the durability of investments. Structures put in place are expected to remain useful for decades, with basically no resources being needed for maintenance, an important factor considering the general lack of capacity of the municipalities to undertake such maintenance. Beyond these specific interventions, maintenance is critical. The Project tried to address this issue through the establishment of the Intermunicipal Consortiums, but results have been limited, with the legal context only recently being formulated at Federal level, and distance between municipalities making maintenance cooperation difficult (see Annex 2). Often, the State road agency continues providing support to the municipalities in the maintenance of their networks following a scheme in use for years in the State. Further building on the concept of intermunicipal consortia (and strengthening such consortia) to further foster responsibility and empowerment of municipalities remains an appealing solution for sustainable municipal road maintenance in service to the local development in the SoT.

*The environmental and social sustainability of works* undertaken under the Project was also well conceived, not only through the activation and adequate management of safeguards but also through the inclusion of a sound environmental component, which intended to preemptively compensate for unintended direct, indirect and cumulative impacts of improving infrastructure access to previously inaccessible areas and promoting further growth and economic activity (mainly agriculture) among remote populations. In view of potential environmental impacts, the Project tried to reinforce the

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<sup>7</sup> as illustrated by the immediate signature by all the 72 municipalities served under the new operation of a cooperation agreements with the State for similar infrastructures

State's environmental protection agenda, through the creation of protected areas, the promotion of land use management, environmental licensing and water management, among others. Although some of the original approaches to land zoning and creation of protected areas were adapted throughout Project implementation, the Project has played a key role in moving forward the debate at State level and in installing cutting edge ideas on environmental management among public officials and decision makers, who now see the environment as an "asset" moving forward. Through PDRS and the GEF Sustainable Cerrado Project, much has been advanced in terms of preparatory work, setting the stage for effective results under the proposed new operation.

## **5. Bank and Borrower Performance**

### **(a) Bank Performance in Ensuring Quality at Entry**

Rating: Moderately Satisfactory

This rating is based on:

- close collaboration between Bank and Borrower during preparation of a novel multi-sector approach;
- adoption of lessons from best practices in designing a local development project
- adoption of balanced approach between sectors (environment, administration and transport) and integration of programs and resources by integrating environmental component into three subcomponents
- relevance to Borrower's and Bank's strategy and priorities (previous and present CPS);
- innovative approaches to strengthen impact such as using standardized concrete structures, improve targeting by using community driven participatory approach, and enhancing monitoring by including survey based impact evaluation

These elements are balanced by the following:

- some shortcomings in the definition of indicators in results framework.

### **(b) Quality of Supervision** (including of fiduciary and safeguards policies)

Rating: Satisfactory

This rating is based on:

- extensive collaboration between Bank and Borrower during supervision as a result of decentralized design (over 200 processes prior reviewed of which 67 tendering documents for works) and close follow-up of Project activities to ensure implementation success;
- energy intensive and time consuming implementation as a result of novel and complex multi sector approach of operation (see sections 2.2, 2.3 and 3.1 for additional details on operation approach);
- multisector operation successful supervision despite traditional operation supervision means;

- Systematic procurement prior review to foster quality of the processes;
- close collaboration during political instability and lack of counterpart funding and pro-activity in liaising with new government teams;
- result oriented allowing satisfactory outcomes for PDO and key indicators as designed, with some caveats, and successful implementation of large number of activities.
- Pro-activity in bringing cutting edge practices in the state development agenda during Project execution (policies environment protection, territorial development and management, road maintenance management etc.);
- safeguards compliance through extensive monitoring, site visits and discussions;
- strong final review supported by impact evaluation survey, to be extended to new operation;
- recognition by client of need for further support and satisfaction with implementation of current loan to request new operation based on similar approach.

These elements are balanced by the following:

- no amendment of results framework during restructuring

### **(c) Justification of Rating for Overall Bank Performance**

Rating: Satisfactory

The rating of Satisfactory is based on an overall balanced assessment of Project quality at entry and during supervision. In particular, this Project required intensive and frequent supervision with greater Bank presence and flexibility to adjust and amplify activities to match the Project complexity and the Client technical and financial capacity. Further, a complex and novel multi sector approach was not adequately reflected by the monitoring framework yet surrogate indicators in a survey-based study provide a degree of security that overall development outcomes were achieved.

## **5.2 Borrower Performance**

### **(a) Government Performance**

Rating: Moderately Satisfactory

This rating is based on:

- overall satisfactory policy dialogue, institutional set-up and general compliance with Bank norms and procedures;
- Commitment to overall Project implementation over the course of 4 administration, and breakthrough in policy dialogue over sustainability, CREMAs, etc, as a result of sustained engagement;
- An overall financial commitment beyond the agreed resources from US\$40 million counterparts to approximately US\$52 million counterparts, despite dire financial and fiscal overall context;
- significant efforts to catch-up with implementation delays and deficiencies in terms of counterpart funding since a new administration took office (January 2011), with positive results in the final 9 months of the Project;

- Full disbursement by Project closing date

This assessment is balanced by:

- challenges in decision making and fluctuating short term commitment as a result of political changes

### **(b) Implementing Agency or Agencies Performance**

Rating: Satisfactory

This rating is based on

- Adequate general institutional capacity and effective management of the Project (technical, fiduciary and safeguards);
- Extra efforts to undertake over 200 different activities under a multisector Project;

This assessment is balanced by:

- institutionalization of Project management and knowledge could have been sought in a more systematic fashion.

### **(c) Justification of Rating for Overall Borrower Performance**

Rating: Moderately Satisfactory

The overall Borrower performance is rated Moderately Satisfactory based on a balanced approach between strong technical performances being undermined by a series of political issues which were redeemed by a committed leadership at project end.

## **6. Lessons Learned**

***Political changes and policy shifts strongly impact Project implementation.*** Political cycles had a clear impact on the rhythm of implementation of the Project. This challenge is amplified in multi-sector operations given the larger number of entities involved in implementation. To address this challenge, Projects should try to limit the number of entities, recognize the risk or factor in political variables in Project design. Moreover, the distribution of Bank and counterpart financing should take into account incentives or disincentives at political levels, as was the case under this operation, to ensure that activities with lower political visibility are still undertaken in a timely fashion.

***In complex, multi-sector operations, attention to clear and functional institutional arrangements are critical to ensure efficiency in Project management.*** Although multiple institutions and stakeholders are involved in multi-sector operations, projects should design some degree of centralization under a unified Project Implementation Unit to make complex operations more manageable and expedite implementation, particularly to facilitate multiple procurement processes. From the Bank's perspective, these multi-sector operations that involve numerous activities and procurement processes inevitably rely on strengthened and intensified Bank supervision.

***Result indicators should be simple, measurable and with a direct causality to the actual Project-financed activities.*** Opting for complex indicators to evaluate complex operations may result in difficulties in monitoring indicators, despite appearing

appropriate during project design. In cases where indicators prove to be inadequate in reflecting results, due to their relevance or feasibility of monitoring, opportunities such as mid-term reviews or restructuring should be used to evaluate their adequacy and potential improvement in an updated Result Framework.

***Impact evaluations provide an excellent tool to capture project impacts, yet there is still much to learn to fully benefit from the potential.*** One issue is that in many cases, project cycles do not necessarily correspond with impact cycles, particularly in areas such as infrastructure where benefits are typically evident only after works are concluded. Building impact evaluations into project design, while a good practice, should not necessarily be bound to the project timeline. Furthermore, challenges in implementing the evaluation highlighted that there is still much to learn regarding methodology (select questions to best target project impacts), implementation (works do not take place at the same time across locations so surveys must be staggered), and assessment (separate between project impacts and external impacts) to fully benefit from the study's potential.

***While participatory, bottom-up, demand-driven initiatives can improve the quality and relevance of investments, clear communication and outreach are needed to foster and sustain empowerment of populations.*** The participatory mechanism in the Project relied on extensive consultation with each municipality that would first determine their local development agenda, and then vote on roads that the government will improve that best capture their needs. Although the Project was ground-breaking in fostering ownership of political decisions by local populations through participatory mechanisms, it also inadvertently created unfulfilled expectations that could have been avoided with clearer communication and outreach. Given that the participatory mechanisms was a highly successful tool, a lesson learned for future operations is to ensure the design of the participatory mechanism is geographically appropriate, sufficient outreach and communication are embedded to manage expectations, and monitoring of implementation is undertaken to ensure sustainability of the empowerment sentiment.

***Adopting a holistic approach in Project design is a useful approach to foster regional development.*** A long term lesson learned through past Bank experiences in the State is the need to move beyond narrow approaches to improving accessibility (focusing on trunk infrastructure or isolated interventions on municipal roads), and adopting a more integrated approach both vertically, within the road network to link various road levels to provide seamless logistics, and horizontally among various other regional development requirements. This “holistic” approach, which is inherently more complex to implement, and to which the new proposed operation is ultimately responding, relies on strong coordination between the different Government levels, ensuring that micro interventions at local level are supplemented by investments undertaken at regional and national level.

## **7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners**

### **(a) Borrower/implementing agencies**

### **(b) Cofinanciers**

**Not applicable**

**(c) Other partners and stakeholders**  
(*e.g. NGOs/private sector/civil society*)

## Annex 1. Project Costs and Financing

### (a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
PLANNING AND MANAGEMENT OF REGIONAL AND MUNICIPAL DEVELOPMENT	6.5	4.1	63%
ENVIRONMENTAL MANAGEMENT	10.20	19.30	189%
RURAL TRANSPORT IMPROVEMENT	42.70	36	84%
<b>Total Baseline Cost</b>	59.40	59.40	100%
Physical Contingencies	0.00	0.00	
Price Contingencies	0.00	0.00	
<b>Total Project Costs</b>	59.40	59.40	100%
Front-end fee PPF	0.00	0.00	
Front-end fee IBRD	0.60	0.60	100%
<b>Total Financing Required</b>	60.00	60.00	100%

### (b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Borrower		40.00	23.00 <sup>8</sup>	50%
International Bank for Reconstruction and Development		60.00	60.00	100%

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<sup>8</sup> This figure is to June 2011. Since then, and after Project completion, the Borrower has paid for project activities. The Borrower is to provide final audit report within 6 months of closing.

## Annex 2. Outputs by Component

This annex provides a more detailed discussion of the achievements of the project outcomes and outputs as established in the Results Framework.

### Sector indicators

	Indicator	End value	Contextual information
Sector-Related CAS Goal Participatory multisectoral planning mechanisms operational at municipal and regional levels	Increased in well-being and incomes as measured by indices such as:		As a general remark on the indicators proposed for this category, one could underline the macro-level measurement such indicators provides. The use of such macro-level indicators is unfortunately not conclusive on project impact. In addition, the frequency of the calculation of an indicator such as the IDH-M does not even correspond to the project timeline, i.e. information for IDH-M could be available for 2000 and 2010, but this interval does not correspond to project start and closure.
	- the Índice de desenvolvimento Humano Municipal	N.A.	The IDH-M (Municipal Human Development Index) is measured based on data from the National Census, which is carried out by IBGE every 10 years. As the last Census has been undertaken in 2010 and as it takes a minimum of 2 years to have the IDH-M data available, there is no possibility to utilize this indicator at project closure. Even with data available, the indicator is not considered pertinent for the purpose of measuring the Project impact due to the lack of causality between the Project activities/outcomes/potential impacts and the measures.
	- Índice de Desenvolvimento Social	N.A.	The index is not an official indicator in Brazil and was not appropriately defined in the context of the Project. The most important deficiency of this indicator stems from its definition at the municipal level, not differentiating between direct project beneficiaries and the rest of the population.
	- Índice de Insuficiência da Renda	N.A.	The index is not an official indicator in Brazil and was not appropriately defined in the context of the Project. A proxy of this indicator could be based on income evolution for the beneficiary households (vs. the households from the comparison group) as identified in the exercise of project impact evaluation. However, such analysis is not possible at ICR time, due to its preliminary stage of the IE implementation.



### Outcome/Impact indicators

	Indicator and target value	End value	Contextual information
Project Development Objectives	Increase in formation of social capital, as measured by:		
	- the Community Participation Index	southeast – membership increased. North – membership decreased	<b>Source: <i>Impact evaluation</i></b> The index is not an official one in Brazil and was not appropriately defined in the Project. An approximation of the value was obtained through the community surveys undertaken in the context of the Project. Project outcome was positive in the Southeast region, with the 11 Associations of Rural producers increasing their average membership from 35 to 43 members/association, not positive in the North region, where there was a decrease in the number of Associations of Rural producers from 20 to 11, with an average of membership equally decreasing from 90 to 72 members/association. Additionally, community participation has been measured through the participation of the population to the participatory process and decision on local development agenda and road intervention priorities, about 5 to 10% of the populations of the municipalities representing a large share (estimated at 50 to 70%) of the rural populations of the municipalities.
	- Increase in number of visits to health facilities and in school attendance	Southeast: all weather access: from 68% to 92%. North: from 52% to 61%.	<b>Source: <i>2010 National CENSUS, IBGE</i></b> An imperfect alternative of measurement of this objective could be provided by the National Census, which offers the possibility to compare the overall rate of illiteracy between 2000 and 2010. For the same municipalities- one observes a decrease in illiteracy of 6.4% from 27.7% to 21.3%. While the decrease shown through IBGE data is a proof of overall increased access to education, it is nevertheless difficult to infer causality from project activities.  <b>Source: <i>Impact evaluation</i></b> Statistics are not on-the-shelf available to serve the indicator, as it was defined during PAD. A proxy was obtained with the all-weather transport accessibility to health and education facilities and the time savings to reach such facilities, obtained through the impact evaluation (household surveys): <ul style="list-style-type: none"> <li>• In the Southeast region, 92% of the interviewees stated having appropriate, all-weather access to health facility, against 68% before the Project works, the time to reach the closest hospital was reduced from an average of 2h to 1h30min. In the North region, those figures were respectively 61% against 52% before the Project and a reduction from 1h52min to 1h25min.</li> <li>• In the Southeast region, 94% of the interviewees stated having improved access to education facilities, versus 79% before the Project and the time to reach the closest pre-school has been reduced from an average of 29 to 27 mins and for secondary school from 45 to 32 mins. In the North region, those figures were respectively 70% versus 66% before the Project and a reduction of 21 to 13 mins for pre-school, from 21 to 17 mins for elementary school, and from 44 to 14 mins for secondary school.</li> </ul>

<p>- Increased share of cash crops in total agricultural production</p>	<p>Southeast 18% vs 7% exported. North 100% vs 26% exported.</p>	<p><b>Source: <i>Impact evaluation</i></b> Statistics were not on-the-shelf available. The household surveys show that for both the Southeast and the North regions, the cumulated percentage of traded production and production serving for both trade and own use has remained constant before and after the Project. Nevertheless, it is important to note that the production has been increasingly commercialized to further away markets. In the Southeast region 18% of the production has been destined to other municipalities after the Project against 7% before, in the North region, 100% of the traded production has been destined to other municipalities after the Project against 26% before. Note: the production does not only refer to crops but in general, to any type of products.</p>
<p>- Decreased price (incl. transport cost component) of key commodities and inputs</p>	<p>N.A.</p>	<p>Data were not available at the time of the ICR. There is no baseline available for the mentioned prices. Neither the household nor the community surveys allowed a proxy of the indicator. With hindsight, prices for commodities and input to production might largely vary depending on a number of parameters turning the indicator, which was commonly used at the time of Project preparation, not fully relevant to assess improved accessibility.</p>
<p>- Decrease in time needed to get to municipal and regional centers</p>	<p>Southeast: decreased from 38.5 to 22.5 km. North: decreased from 18.5 to 10 km.</p>	<p><b>Source: <i>Impact evaluation</i></b> Statistics were not on-the-shelf available. The household survey showed that in the Southeast, the average distance to the municipal center has decreased from 38.5 to 22.5 km (from Marco Zero to Marco Um), while in the North the same average distance has decreased from 18.5 to 10 km. These results are informative with respect to the utility of focusing on the elimination of critical spots through the construction of bridges and culverts.</p>

## Output indicators

Examples of activities		Indicator and target value	End value	Contextual information
<p style="text-align: center;">**Technical Support to Tocantins State Development Strategy</p> <p style="text-align: center;">**Technical Support for Collecting Baseline Data for the Regions</p>	Component 1.1. Participatory multisectoral planning mechanisms operational at municipal and regional levels	Number of finalized municipal development agenda prepared by MDFs: 20 by end 2003, 40 by end 2005, and 60 by end 2007	67	<p>The target for the indicator was met. The endorsement of this activity has been unanimous and all municipalities have carried out this valuable exercise. The establishment of the development agendas included a 1<sup>st</sup> phase of participatory diagnostic (with preliminary training) and a 2<sup>nd</sup> phase of official data collection. The information gathered through the two channels was then over-lapped, leading to a draft version of the agenda, discussed one more time with the community. This iterative process has represented a steep learning process – not only for the communities on strategies of empowerment, but also for the State Planning Secretary on the challenges and opportunities of its remote municipalities.</p> <p>Looking for improvement, it can be stated that this indicator might not have appropriately captured the sustainability of this successful initiative. In fact, the municipal development agenda may - in several cases - not have materialized in concrete actions (besides the works or other activities directly financed by the Project). Also, the exercise of public participation to the definition of the local development agenda may not have been continued after the Project in some cases.</p> <p>While the preparation of local development agendas based on participatory mechanisms is a rich source of empowerment of populations, it may also create unfulfilled expectations: in fact, such exercise commits only the jurisdiction which undertakes it and in Brazil, different support programs depend on different jurisdictions (typically, some difficulties in committing Federal authorities to development agenda promoted by the State/or municipality could occur). A better articulation between existing Federal and State programs and, if possible, involvement of each jurisdiction, would allow better customization of the development agenda.</p>
<p>**Basic Training on Hardware and Software</p>		Number of pilot CONDERS established: 2 by end 2005, and 4 by end 2006	4	<p>The target for the indicator was partly achieved if one considers only CONDERS per se and was fully achieved if equivalent structures are counted. Some difficulties in implementation have resulted from difficulty to bring together representatives of remote municipalities with low access to transport means. Another hindrance originated from the novelty in Brazil to bring together different jurisdictions/municipalities to discuss on common goals.</p> <p>Despite these difficulties though, discussions held between stakeholders in the preparation of the CONDERS have been very constructive and two out of the four regions have created such an instance (Sudeste and Nordeste). In the other two regions (Jalapao and Bico-de-Papagaio), there was an already existing regional structure, with similar terms of reference, created by programs of the Ministry of Agricultural Development and the Ministry of National Integration. It was therefore decided not to create a new forum that would double the</p>

<p>**Provision Of Software, Hardware And Equipments for Seinfra and Dertins</p>			<p>existing one. This would lead to an understanding that all four regions benefited from a CONDER-type forum, may it be due to the project or due to federal programs. Together, all of these fora will be strengthened under the next operation. Overall, the Project expected output was considered achieved.</p> <p>The selected indicator was pertinent to measure the strengthening of the regional development capacity. In terms of the interaction inside the CONDER and the substantive work carried out through the CONDER, in the future, such an initiative could be better assessed by indicators focusing on the dynamics and efficiency of the CONDER (frequency of meeting, feasibility of projects, projects implemented out of the projects discussed). In addition, it would be good practice to verify that no other a-priori fora exist, to avoid an overlap of structures and responsibilities.</p>
<p>**Technical Assistance to Nordeste UTR</p>		<p>Number of regional development agenda finalized 1 by end 2006 and 4 by end 2008</p>	<p>4</p> <p>The target for the indicator target was fully achieved. At first, the novelty of the process of establishing regional development agendas has led to delays in the preparation of the agenda. The main difficulty has been to acquire a regional vision of development – which implies trade-offs between individual municipal priorities - and to surpass inter-municipal competitions for resources. Nevertheless, all four regions targeted by the Project managed to prepare regional development agendas by Project end. Worth noting is that the new four years State Development Agenda (PPA) is based on a series of 9 regional development agendas.</p> <p>Looking for improvement, one could notice that the indicator does not offer the possibility to capture the sustainability of the practice.</p>
	<p>Component 1.2. Planning and public programs management capacity strengthened</p>	<p>Number of UTRs established: 2 by end 2004 and 4 by end 2006</p>	<p>4</p> <p>The target for the indicator was fully met, and despite delays, all technical units are operational. The new PPA envisages deepening the de-concentration of the State administration and, while rationalizing the state administration representation in the regions, strengthening the role of the UTRs.</p> <p>The selected indicator was pertinent to measure improvement in the state administration capacity to support regional initiatives.</p>
		<p>Number of inter-municipal consortia created: 1 by end 2005, 4 by end 2008</p>	<p>0</p> <p>The target for the indicator target was not met. In hindsight, the creation of the consortia in the timeframe of the Project has been very ambitious: first, the legal context has only recently officialized the status of intermunicipal consortia; second, distances and lack of appropriate transport means between municipalities may have been compounding difficulties; third, the syndication of means between different jurisdiction/municipalities is a very innovative concept in Brazil, difficult to put in practice in the context of a Project. However, the concept has matured and has been kept as an intermediate outcome indicator in the context of the new Bank operation with Tocantins.</p> <p>Looking for improvement, not only the creation of the consortium should have been an objective, but also its operationalization. Such establishment of the consortia is an intermediate outcome indicator of the new Bank operation with Tocantins. Another element of improvement concerns a clearer definition of the role of the State, not only in providing technical assistance but also material or financial resources. Such an arrangement</p>

			might reduce the tension between municipalities over the scarce existing resources.
		Increase in number of municipalities presenting annual statements conforming accounting standards and the requirements of the Law on Fiscal Responsibility: 20% by end 2005, 30% by end 2008	<p>100%</p> <p>The target for the indicator target was met.</p> <p>The indicator was in principle a pertinent selection. However, while the Project was aimed at contributing to improve the administration of the municipalities, the full achievement of the target might have more resulted from the enforcement of the Fiscal Responsibility Law by the Federal authorities than from the Project. Nonetheless, efforts from the State Secretary of Finance in improving the fiscal state systems (paperless processes), with Project support have helped in achieving those results.</p> <p>The indicator, as defined in the PAD, has in fact become obsolete as, by Project end, the use of electronic formats for annual statement has been compulsory for all municipalities.</p>
		State planning system strengthened by end 2008	<p>Yes</p> <p>It can be contended that the State planning system was strengthened during Project implementation and that the Project contributed to such improvement, by providing specific consulting support e.g. in the definition of the State PPA and Strategy Agenda, a number of training opportunities for staff in monitoring and evaluation (40 staff for a training on indicators) and public administration (40 staff for a post-graduate program in public administration with a 95% graduation achievement).</p> <p>The indicator was not the most pertinent, due to the vagueness of its definition. As best practice, such an indicator could include quantitative goals such as the percentage of performance-based programs or the percentage of teams with specific action plans deriving from the PPA.</p>
<p>**Supply of an Ultralight Airplane for Environmental Monitoring</p> <p>**Study on Dynamic of Land Cover and Use Of The Territory</p> <p>**Preparation</p>	Component 2. State environmental management consolidated	Number of regional zonings ready: 3 by end 2005, 6 by end 2008	<p>4</p> <p>The target for the indicator target was partially met.</p> <p>More than 50% of target met, including 1 geographic and 3 thematic zonings. The target would have been fully met had there been additional time. The new operation will finance an integrated territorial management plan (TOR prepared), covering all regions and themes.</p> <p>The indicator was an attempt to monitor improved capacity of the State in regional and territorial management. It may have only partially been able to capture such improvement due to its binary nature.</p>
		Number of protected areas to be established by end 2008: 6	<p>0</p> <p>Target partially met: preparatory activities for the establishment of three times more areas than the targets (18 vs. 6) finalized; effective establishment of the areas underway, pending on lengthy processes of consultation and community mobilization, political decisions, and handling of social issues to manage stakeholders' expectations.</p> <p>The indicator was not the most pertinent to measure the Project achievement in terms of environment protection. With hindsight, experience shows that the establishment of protected areas requires long processes, far beyond the cycle of a Bank Project</p>

<p>of Master Plan for the Palma River Basin</p> <p>**Training: Master In Hydric Resources</p> <p>***Supply of 4 Hydrometeorological Stations</p>		<p>Land use management tools approved and in use by end 2008</p>	<p>3</p>	<p>Target met: tools included satellite images and maps, as well as 2 master plans (land use and coverage changes, and forest inventory) in support to the State territorial management in environmental conservation, expansion of productive activities (agribusiness), carbon footprint.</p>
<p>**Road Improvement Works</p> <p>**Supervision of works</p> <p>**Civil Works for Maintenance and Rehabilitation of Roads</p> <p>**Engineering designs of Civil Works</p>	<p>Component 3. Rural transport improvement</p>	<p>85% of the critical points on the main municipal road networks eliminated by end 2008</p>	<p>95%</p>	<p>The target for the indicator is assessed as met. Approximately 95% of the envisioned works have been undertaken, with works finalized in 62 of the 67 municipalities. In addition, the Borrower is committed to finalize the works in the remaining municipalities after Project end.</p> <p>The indicator is straightforward and accurate in assessing the progress in this activity. Looking for further improvement, however, the indicator could have been better defined as the municipal network characteristics (i) were relatively unknown at preparation (and remain so at completion), (ii) the extension may have slightly increased during Project execution.</p>
		<p>Traffic on improved connecting roads increased 15% by end 2008</p>	<p>200% (15% annually)</p>	<p>The target for the indicator was achieved. Between 1999 and 2009, VDM increased on average 450% across 66 segments in the State (i.e, 15% per year on the connecting roads), between 2009 and 2010 it continued growing at 13% in average. Compounding the above annual growth, the value between 2003 and 2008 is 200%</p>
		<p>120 km of connecting roads improved by end 2008</p>	<p>143</p>	<p>The target for the indicator target was met. Improvements have consisted in works to prepare roads for paving by eliminating critical spots (such as narrow bridges) and rehabilitation of roads. The 143 km of improved roads include the segments of Palmas-Paraiso (TO-080, 50km) and Dianopolis-Conceicao (90 km). The indicator is considered appropriate (but could have better defined the notion of connecting roads as well as the notion of improvement).</p>
		<p>DERTINS planning, operations, and monitoring capacity strengthened by end 2007</p>	<p>Yes</p>	<p>It is assessed that the target was achieved. A number of initiatives have been undertaken during the Project to support improved planning, operation and monitoring capacity of the DERTINS during the Project. Studies of road and traffic conditions were undertaken. Two exercises of evaluation of the pavement conditions of the State network were carried out, with the full participation of the technical teams. A pavement management system was created. A series of trainings has been, from which 200 staff members have benefited from on</p>

			<p>topics ranging from the construction and maintenance of highways to the management of operations and road safety.</p> <p>The Indicator was insufficiently well defined to be operational (notably on the notion of strengthened capacity).</p>
		<p>2 pilot output-based maintenance contracts on 1,000 km of state and 1,000 of municipal networks signed by end 2006</p> <p>0</p>	<p>The target for the indicator target was not met. While no pilot contract has been set out, continuous dialogue between the Bank and the Borrower has allowed the road agency to adopt the concept for the follow on loan. As a result, the Government has now fully embarked on the concept by incorporating in the new operation activities towards the management of the network through CREMA contracts (more than 1/3 of the network).</p> <p>While the indicator was a good choice to measure improved management capacity of the road network, it may have been too ambitious but resulted in a positive outcome.</p>

## **Annex 3. Economic and Financial Analysis**

### ***Introduction***

1. This annex summarizes the cost-benefit analysis of the municipal roads improvement component. The economic evaluation follows a similar methodology as that adopted during Appraisal. However, several major changes have been taken into account based on: (i) pre- and post-Project historical agricultural production trends, (ii) updated production forecasts, (iii) updated unit values of benefit and cost parameters, and (iv) final Project implementation costs.
2. Economic benefits created by the component were analyzed using the Producer's Surplus approach considering that the interventions are mainly located on a network characterized by very low levels of traffic (often less than 50 vehicles per day) and the absence of alternative routes which made the common consumer surplus method inapplicable. The net present value (NPV) of the economic benefits generated over the 10 years is estimated at about R\$27.5 million (US\$15 million) at a 12% discount rate, and its economic internal rate of return is estimated at 20.2%.

### ***Impact of the Improvement on agricultural and livestock production in Tocantins***

3. Agricultural production in the Eastern part of the State of Tocantins is dominated by five products: rice, sugar-cane, cassava, corn, and soy-beans. In addition, two products were included for livestock and for derived products, considering their respective weight in the total production: meat and milk.
4. Improvement to all weather conditions of the municipal feeder roads were expected to result in: (i) reduction of overall production costs, notably, reductions in transport costs, decrease in stocks, and reduction of losses accounting to transport and stocking; (ii) productivity gains, differing depending on the products; (iii) increased size of cultivated areas; and (iv) faster changes towards more productive agriculture in areas where available land is scarce.

### ***Evaluation of benefits and costs***

5. The producer surplus was calculated as the increase in the value of production net of production costs, resulting from the investments, within the area of influence of the road. The following methodological hypotheses were taken: (i) investments have a negligible impact on the local consumption of local goods; (ii) investments have a negligible impact on global market prices; and (iii) impacts on the cost of road maintenance resulting from possible traffic growth was not taken into account.
6. The producer surplus evaluation is based on the following steps: (i) the area of influence of the improved roads was estimated; (ii) the average characteristics of farms and main types of productions within the area of influence of the road were identified (iii) the computation of the value-added for each type of product in both the with and without



Project case scenarios was based on historical series and previous experiences; (iv) producer surplus is estimated as a difference in value-added between the with and without Project case scenarios; and (v) NPV and IRR were obtained based on the estimated surplus and Project costs.

7. The analysis at completion incorporated the following changes vis a vis the estimation at Appraisal:

- a. *Implementation was delayed.* The Project implementation was planned to begin in 2004 and to be completed in four years. However, the implementation period was extended to seven years starting in 2006. Accordingly, the timeframe of the economic evaluation was also changed. Originally the evaluation period was 2003-2013, and now it is 2006-2016. It is also assumed that benefits were generated only after 2009.
- b. *Area of influence of Project roads was reduced.* Since the budget was shrunk after the Real appreciated against US Dollar from US\$1 = R\$ 2.9 at Appraisal to R\$1.7 at completion, the total number of kilometers intervened under the Project was reduced from the envisaged 5,670 km, to 5,121 km (falling by 550 km). Accordingly, the area of influence of the Project was reduced to 39% of the Eastern region, instead of 44%.
- c. *Agricultural production significantly increased.* Some of productions have a significantly higher value than was forecasted at Appraisal. For example, the value of soy-bean production had grown by 5 times during the 9 year period even after adjusting for inflation. The analysis used the latest production data available for 2009.

8. The annual value of investments under the component was based on the actual payment values for the contracts including works, designs, and supervision. No maintenance costs are assumed because structures developed by the component require minimum maintenance. Data for 2012 are estimates based on sales contracts.

9. The area of influence is limited to 5 km on each side of the road segment. Assuming the total length under the component is 5,121km and an average length of each segment is 15km, the total area of influence is 39% of the area of all 67 municipalities in Eastern Tocantins.

10. Agricultural production was derived from data at the level of each municipality in 2009. Since the detailed production data is available only for 2001 and 2009, the total production in the base year of 2006 was estimated with a weighted average of 2001 and 2009. The Project is assumed to contribute to the following improvements in production: i) area of cultivation for all types of crops will increase annually at 2.5% in 2009-2012 and 5.4% in 2012- 2016; (ii) productivities of all crops (production per area) grows at 1% per year in 2009-2012 and remains constant after 2013; and (iii) production of livestock goes up at 1% annually in 2009-2016. Meanwhile, in the without-Project case scenario, both production area and productivity stay at the same level as 2006.

11. Value-added of each production was obtained by subtracting costs from production values. The costs of production were based on existing statistics. While the Project is assumed to reduce the costs of production for all crops at 1% per year between 2009 and 2016, the costs do not change in the without-Project case scenario.

Estimated Agricultural Productions for Crops

	Total	Rice	Sugar Cane	Cassava	Corn	Soy- beans
<b>Year 0 (2006)</b>						
Area (10 <sup>6</sup> ha)	<b>102.5</b>	14.6	1.9	2.7	13.3	70.0
Yield (t/ha)	...	1.7	75.7	15.7	4.3	2.7
Production (1000 t)	<b>461.8</b>	25.3	145.1	42.1	57.3	192.1
Production Value (R\$ 10 <sup>6</sup> )	<b>181.5</b>	15.5	14.9	5.2	18.2	127.7
Unit Cost (R\$/ha)	...	0.63	6.65	0.31	0.86	1.02
Total Cost (R\$ 10 <sup>6</sup> )	<b>105.2</b>	9.1	12.7	0.8	11.4	71.1
Net Value of Production (R\$ 10 <sup>6</sup> )	<b>76.2</b>	6.4	2.1	4.3	6.7	56.6
<b>Year 3 (2009)</b>						
Area (10 <sup>6</sup> ha)	<b>105.1</b>	14.1	2.5	3.2	15.4	70.0
Yield (t/ha)	...	1.8	82.3	17.7	4.3	2.7
Production (1000 t)	<b>548.8</b>	25.6	207.7	56.7	66.7	192.1
Production Value (R\$ 10 <sup>6</sup> )	<b>192.8</b>	15.7	21.3	6.9	21.1	127.7
Unit Cost (R\$/ha)	...	0.62	6.58	0.31	0.85	1.01
Total Cost (R\$ 10 <sup>6</sup> )	<b>109.7</b>	8.7	16.6	1.0	13.1	70.4
Net Value of Production (R\$ 10 <sup>6</sup> )	<b>83.1</b>	7.0	4.7	6.0	8.1	57.4
<b>Producer Surplus (R\$ 10<sup>6</sup>)</b>	<b>6.8</b>	<b>0.6</b>	<b>2.6</b>	<b>1.6</b>	<b>1.4</b>	<b>0.7</b>
<b>Year 5 (2011)</b>						
Area (10 <sup>6</sup> ha)	<b>110.4</b>	14.8	2.7	3.4	16.1	73.5
Yield (t/ha)	...	1.9	83.9	18.1	4.4	2.8
Production (1000 t)	<b>587.7</b>	27.4	222.5	60.7	71.4	205.7
Production Value (R\$ 10 <sup>6</sup> )	<b>206.5</b>	16.8	22.8	7.4	22.6	136.8
Unit Cost (R\$/ha)	...	0.61	6.45	0.30	0.83	0.99
Total Cost (R\$ 10 <sup>6</sup> )	<b>112.9</b>	9.0	17.1	1.0	13.4	72.4
Net Value of Production (R\$ 10 <sup>6</sup> )	<b>93.6</b>	7.9	5.7	6.4	9.2	64.4
<b>Producer Surplus (R\$ 10<sup>6</sup>)</b>	<b>17.4</b>	<b>1.5</b>	<b>3.6</b>	<b>2.1</b>	<b>2.5</b>	<b>7.7</b>
<b>Year 10 (2016)</b>						
Area (10 <sup>6</sup> ha)	<b>143.5</b>	19.2	3.4	4.4	21.0	95.5
Yield (t/ha)	...	1.9	83.9	18.1	4.4	2.8
Production (1000 t)	<b>764.0</b>	35.7	289.2	78.9	92.9	267.4
Production Value (R\$ 10 <sup>6</sup> )	<b>268.5</b>	21.9	29.7	9.7	29.4	177.8
Unit Cost (R\$/ha)	...	0.58	6.13	0.28	0.79	0.94
Total Cost (R\$ 10 <sup>6</sup> )	<b>139.5</b>	11.1	21.1	1.2	16.6	89.4
Net Value of Production (R\$ 10 <sup>6</sup> )	<b>129.0</b>	<b>10.8</b>	8.5	8.4	12.8	88.4
<b>Producer Surplus (R\$ 10<sup>6</sup>)</b>	<b>52.8</b>	<b>4.4</b>	<b>6.4</b>	<b>4.1</b>	<b>6.1</b>	<b>31.8</b>

### Estimated Agricultural Productions for Cattle

	2006	2009	2011	2016
# of Cattle (1000 heads)	2,136	2,070	2,247	2,545
Meat (1000 heads)	130	127	137	155
Production Value (R\$10 <sup>6</sup> )	165	160	173	197
Surplus from Cattles (R\$10 <sup>6</sup> )		3.5	6.4	9.6

12. Lastly, producer surplus was estimated as a difference in value-added between the with and without Project scenarios. The net benefit flow was also calculated by subtracting investment from the total surplus. A salvage value in 2016 is obtained as 10% of the total investment, which is same as that used at Appraisal. The table below summarizes the surplus and the net benefits.

#### Producer Surplus and Net Economic Benefits (R\$ 10<sup>6</sup>)

Year	Surplus Crops	Surplus Livestock	Total Surplus	Investment	Net Flow
2006	0	0	-	0.8	-0.8
2007	0	0	-	15.6	-15.6
2008	0	0	-	32.3	-32.3
2009	6.8	3.5	10.3	16.4	-6.1
2010	12.1	4.9	17.0	29.6	-12.6
2011	17.4	6.4	23.7	25.6	-1.8
2012	24.4	7.0	31.5	24.7	6.8
2013	31.5	7.7	39.2		39.2
2014	38.6	8.3	46.9		46.9
2015	45.7	9.0	54.7		54.7
2016	52.8	9.6	62.4	-14.5	76.9

### **Results**

13. Computed on a 10-year period, the net present value (NPV) of the subcomponent, at a 12% discount rate, is estimated at R\$27.5 million (US\$15 million) and the internal rate of return (IRR) yields 20.2%. The analysis included all of the 67 municipalities comprised in the Project.

## Annex 4. Bank Lending and Implementation Support/Supervision Processes

### (a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
<b>Lending</b>			
Jacques L. Cellier	Consultant	LCSTR	
Flavio Chaves	Operations Analyst	LCSTR	
Aymeric-Albin Meyer	Senior Operations Officer	OPCIL	
Jean-Claude Sallier	Consultant	LCSTR	
<b>Supervision/ICR</b>			
Jacques L. Cellier	Consultant	LCSTR	
Flavio Chaves	Operations Analyst	LCSTR	
Juliana Menezes Garrido Pereira	Infrastructure Specialist	LCSUW	
Gregoire Francois Gauthier	Transport. Engineer	LCSTR	
Elisabeth Goller	Sr Transport. Spec.	LCSTR	
Eric R. Lancelot	Sr Transport. Engr.	LCSTR	
Jose Ricardo Marar	E T Consultant	LCSTR	
Aymeric-Albin Meyer	Senior Operations Officer	OPCIL	
Jason Jacques Paiement	E T Consultant	LCSSO	
Jean-Claude Sallier	Consultant	LCSTR	
Sivan Susan Tamir	ET Consultant	LCSTR	
Adrien J. Veron	Consultant	LCSTR	
Elisabet Vila Jorda	Junior Professional Associate	LCSTR	
Isabela Manelici	Junior Professional Associate	TWITR	
Satoshi Ogita	E T Consultant	LCSTR	

### (b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
<b>Lending</b>		
FY01		3.36
FY02		172.65
FY03		124.07
FY04		41.37
FY05		0.00
FY06		0.00
FY07		0.00
FY08		0.00
<b>Total:</b>		341.45
<b>Supervision/ICR</b>		
FY01		0.00
FY02		0.00

FY03		0.00
FY04		40.07
FY05		89.13
FY06		92.85
FY07		77.93
FY08		84.56
	<b>Total:</b>	384.54

**Annex 5. Beneficiary Survey Results**

**Annex 6. Stakeholder Workshop Report and Results**  
*(if any)*

## **Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR**

### **SUMMARY OF CLIENT'S ICR:**

#### ***General context of the Project***

During implementation, the Project had different phases of execution that may be summarized as follow:

- (i) Slow beginning, with more than 1 year between approval by the Bank on December 9, 2003 and effectiveness, December 20, 2004, for reasons beyond the reach of both the Bank and the State of Tocantins. This was further compounded by initial delays in (a) contracting the first activities due to the election year both at the State and municipal levels, (b) coordinate the different fronts of activities between the different institutions involved, (c) insufficient allocation of counterpart funds
- (ii) 2005-2008 – Satisfying implementation: there was a partial recovery of the initial delays during the period.
- (iii) 2009-2010 – New obstacles and new delays: in the period 2009-2010, new obstacle occurred which impacted Project implementation, including the national crisis on concrete and steel, the impeachment of the Governor Miranda, an interim government and budget shortages in 2009 and 2010 (about 15%)
- (iv) 2011 – A new priority: on January 1<sup>st</sup>, 2011, the new Governor Siqueira Campos identified the finalization of the Project as one of his priorities. Despite difficulties in mobilizing counterpart funds, the Government concluded on time the Project disbursements and most of the planned activities.

#### ***State overall assessment of the Project outcome***

The Project allowed the introduction of substantial improvements in three fundamental pillars of the development in Tocantins: regional and local development planning and management, environmental protection and territorial management and upgrading and maintenance of the state and municipal roads.

Fostering planning and regional management of public programs based on technical, economical and environmental criteria, as well as the increased participation of communities allowed strengthening: (i) existing Projects, through the implantation of 4 regional development councils (Conder) and local fora; (ii) strengthening the management capacity of municipalities with technical support, training and information via the creation of 4 technical regional units (UTR).

In environment protection, and water management, the Project managed significant achievements, including the creation of various tools from planning studies, such as water resources management plans, irrigation masterplan, environmental programs of sustainable biodiversity conservation etc. to technical studies and tools, such as assessment of underground water use, hidrometeorological planning study, implantation of hidrometeorological stations. The Project also contributed to strengthen the institutions in charge of environmental management and the Project helped mobilizing the society on the question of environment as well. For the first time, it was possible to identify priority areas for conservation of biodiversity in the State, assess socio-economic parameters of

influence, and the tendencies of human occupation of the territories, as well as formulate actions to protect natural resources. This led to the selection of 18 areas. The Project helped building public policies on environment and support tools for sustainable development such as fauna and fish protection, irrigation, as well as management instruments such as on authorization of the use of water resources.

The Project helped improving accessibility to areas of production in the regions of Bico de Papagaio, Nordeste, Jalapao and Sudeste, the State Poorest regions. This better integration between the municipal feeder roads and the State road network fostered the competitiveness of the productive areas and eased access to social services to the populations. On the institutional side, the Project supported a number of activities which contributed to improve the state management capacity.

Despite challenges mentioned above that took place during the lifetime of the loan, and some technical shortcomings outlined in the client's lessons learned, the Client acknowledges that the Project was able to overcome those challenges, resulting in, on its assessment, an overall fully satisfactory performance of the project, which is reflected in the accomplishment of the majority of the indicators.



## CLIENT'S ICR:

### Contexto geral do Projeto

Ao longo da implementação do projeto, o PDRS teve fases distintas que podem ser divididas em:

(i) **Início Lento**, hiato de mais de 1 ano entre a aprovação do Projeto pelo Banco no dia 09 de dezembro de 2003 e a sua declaração de efetividade em 20 de dezembro de 2004, por motivos alheios tanto ao Banco quanto ao Estado do Tocantins e atrasos específicos no início do Projeto para: (a) contratar as primeiras atividades devido ao ano de eleições estaduais e municipais; (b) coordenar as várias frentes de atividades dos diferentes Órgãos envolvidos; e, (c) alocar verbas suficientes de contrapartida;

(ii) **2005-2008 – Desempenho Satisfatório**: houve uma recuperação parcial dos atrasos neste período, conforme destacado nas missões técnicas do Banco em visita ao Estado entre o final de 2007 e final de 2008. As respectivas “Ajuda Memória” constatam o bom desempenho na execução do projeto;

(iii) **2009-2010 – Fatores inéditos e nova lentidão**: no decorrer dos anos de 2009 e 2010, outros fatores inéditos interferiram no andamento do projeto, em particular, tais como a crise nacional do cimento e do aço; o julgamento de um Recurso contra Expedição de Diploma (RCED) contra o governador Marcelo Miranda, que culminou na cassação de seu mandato; o início de um governo interino e a frustração de receita nos anos de 2009 e 2010 (cerca de 15%).

(iv) **2011 – Conclusão prioritária**: em 1º de janeiro de 2011 assume o Governo Siqueira Campos, e elege como uma de suas metas prioritárias a finalização do PDRS. Mesmo com dificuldades de mobilização de recursos financeiros o Governo concluiu todo o desembolso do projeto dentro do prazo de finalização do contrato.

### Avaliação dos Objetivos, por macro componente

#### Planejamento e gestão do desenvolvimento regional e local

A estratégia do projeto consistiu reforçar esse aspecto a partir de: (i) novos mecanismos de planejamento multisetorial participativo, ao nível operacional e regional; e, (ii) do reforço da capacidade de planejamento e gerenciamento de programas.

No primeiro segmento, o projeto focou:

- na preparação de Agendas de Desenvolvimento Municipais, com plena participação das populações locais, em todos os 67 municípios beneficiados pelo PDRS. As agendas de desenvolvimento municipais representaram um marco importante, pois foram trabalhos pioneiros na sistematização das demandas da sociedade local, anteriormente restringiam-se ao levantamento de dados secundários e cenários, tendo uma conotação eminentemente tecnocrática.
- na criação de 4 Conselhos de Desenvolvimento Regionais – CONDERs, dos quais se criou 4, inicialmente na região Sudeste e ao final na região Nordeste. Nas regiões do Bico do Papagaio e do Jalapão, já haviam Programas de territórios de cidadania (patrocinados pelo Governo Federal). Foi acordado que poderia ser redundante criar-se uma nova instância consultiva. Os fóruns apresentam um papel relevante, pois representou uma oportunidade da sociedade em indicar investimentos prioritários para o governo estadual, mas também o federal e conhecer melhor a própria região, pois seu conhecimento ficava circunscrito basicamente ao seu espaço local.
- na preparação de 4 Agendas de Desenvolvimento.

No segundo segmento, o projeto focou:

- na criação de 4 Unidades Técnicas Regionais (UTRs) para darem apoio técnico aos CONDERs;
- Em relação ao cumprimento da Lei de Responsabilidade Fiscal;
- reforçar o Sistema de planejamento Estadual.

#### Gerenciamento ambiental do Estado

Nesse componente o PDRS objetivou: (i) consolidar os zoneamentos regionais; (ii) aumentar o número de áreas de proteção; e, (iii) aprimorar e institucionalizar ferramentas de gerenciamento do uso do solo.

Na implementação do primeiro segmento houve divergências de abordagem conceitual quanto ao tipo de zoneamento ambiental a ser executado. Considerou-se que a definição de zoneamento ambiental na modalidade ecológico-econômico equivaleria ao sistema de apoio ao ordenamento de uso da terra com base georreferenciada, visando tanto a expansão produtiva, a conservação/proteção ambiental (conservação da biodiversidade e dos recursos hídricos, quanto a mitigação dos impactos), tendo como base a compartimentação da paisagem. Houveram diversas interações técnicas entre o Banco e a Seplan, que

culminaram com a apresentação e pré-aprovação, por parte do Banco, de termos de referências para possíveis e futuras conduções de atividades (compartimentação ambiental, e zoneamento ecológico-econômico). Além disso, no período houve avanço significativo na condução de estudos básicos ambientais (i- estudo da dinâmica da cobertura e uso da terra; ii- mapeamento das regiões fitoecológicas), em maior detalhe escalar, fundamentais para a compartimentação da paisagem, que irá subsidiar a definição de zonas ecológico-econômicas.

No segundo vetor desse componente, foram efetuadas atividades de avaliação ecológica rápida em áreas prioritárias para conservação ambiental, onde foram indicadas 18 áreas como sendo prioritárias. Até o momento nenhuma delas foi institucionalizada, mas mais de 90% do processo foi realizado, uma vez que a etapa subsequente dependerá apenas de consultas públicas e da edição de Lei específica

As ferramentas referentes ao terceiro vetor referem-se à implementação do Licenciamento Florestal da Propriedade Rural (LFPR), Cadastro Ambiental Rural (CAR) ou outras ações de Comando e Controle do então Órgão executor da Política Ambiental do Estado do Tocantins (Naturatins), especificamente para monitoramento do uso e cobertura da terra. Quaisquer das ferramentas foram implantadas. As razões primordiais foram: (i) o atraso na condução de atividades previstas no macrocomponente Consolidação do Sistema de Proteção Ambiental e Gestão Territorial, que subsidiariam a construção de estudos que dariam suporte a tais ferramentas, e.g. Estudo da Dinâmica da Cobertura e Uso da Terra; (ii) e alterações na estrutura do Governo Estadual, que promoveu durante determinado período, alterações nos vínculos institucionais entre o órgão executor da política ambiental (Naturatins) e os órgãos responsáveis pela condução do PDRS.

#### Melhoramento e conservação de rodovias estaduais e municipais

Seus subcomponentes foram: (i) eliminação de pontos críticos de estradas vicinais municipais prioritárias das regiões que compõem a faixa leste do Estado; (ii) melhorias em estradas estaduais de conexão; (iii) dois contratos-piloto de manutenção remunerados por desempenho; (iv) reforço da capacidade do DERTINS em planejamento, operação e controle.

O primeiro subcomponente (vicinais) é a âncora do PDRS. A meta de eliminação de 85% dos pontos críticos da malha municipal beneficiada foi suplantada. Dos 67 municípios contemplados a maior parte foi finalizada no horizonte do empréstimo. Seis contratos de obras foram suspensos por falta de capacidade ou de interesse das licitantes vencedoras, e o Estado já iniciou novas licitações (fev 2012), inteiramente lastreadas em recursos próprios. Por constituir o principal foco do PDRS, maiores detalhes constam na Parte 6 deste Relatório.

As melhorias em estradas de conexão (estaduais) foram implantadas e consistiram em obras de preparação a pavimentação (bueiros celulares), já que volumes de tráfego eram insuficientes para justificar economicamente de pavimentação e. Ao total foram atendidos 143 Km de rodovias com eliminação de pontos críticos e reabilitação. Os trechos beneficiados foram Dianópolis/Conceição do Tocantins e Palmas-Paraíso do Tocantins.

Contratos-piloto: O valor do componente foi estimado no PAD em US\$ 4,6 milhões. Os contratos-piloto para as estradas municipais (vicinais, não pavimentadas) foram excluídos após exame dos prós e contras. O principal fator (contra) foi a vulnerabilidade dessas vicinais aos fatores climáticos adversos e aleatórios, e a tendência do setor privado em embutir tais riscos nos seus preços propostos. O valor de US\$ 4,6 milhões, após exercícios de simulação efetuados, seria suficiente para menos de 1.000 km nos quais constassem serviços de restauração + 3 anos de conserva.

No subcomponente de reforço do Órgão Rodoviário destacam-se os seguintes aspectos: a malha estadual (pavimentada e não-pavimentada) foi inteiramente georeferenciada e o órgão mantém o banco de dados atualizado por meios próprios. O sistema de conhecimento de tráfego (volume médio diário de veículos, por tipo de veículo) foi 100% implantado. O sistema também é mantido pelos próprios funcionários. Foram feitos dois exercícios de avaliação da condição dos pavimentos para toda malha pavimentada estadual, com plena participação de funcionários das áreas técnica e de conserva. Foram treinados mais de 200 funcionários em diversos temas técnicos e gerenciais, segundo sete categorias (Administrativa e Financeira, Construção e Manutenção de Rodovias, Georeferenciamento, Meio Ambiente, Operação e Segurança, Planejamento rodoviário e Informática). Um subproduto positivo não previsto originalmente, foi o elevado grau de satisfação demonstrado pela maior parte dos(as) treinandos(as) em termos de percepção de sua valorização.

#### **Compilações das Lições Aprendidas**

##### **Descrição sumária do ambiente em que o projeto se desenvolveu**

Considerando os **aspectos político-administrativos**, o PDRS foi um projeto com baixa percepção de ganho político, não tendo sido prioritário por parte dos governantes. Este problema foi potencializado em função das trocas de governadores que ocorreram principalmente quando o projeto deveria ter sua maior execução. Ao total houveram 3 (três) governantes em um período de 3 (três) anos.

Nos **aspectos financeiros e de câmbio**, entre os entrevistados foi unânime a percepção que este último gerou uma perda inesperada em relação ao montante financeiro disponível para o projeto. O dólar referência usado no *Project Appraisal Document* – PAD foi de R\$ 2,9 e o dólar médio ao longo do projeto foi de R\$ 1,80. Apesar disso, existe uma percepção que o impacto na execução física do projeto foi inferior à redução financeira causada pelo câmbio, em função de um acompanhamento da execução dos contratos.

Um outro aspecto considerado foi o atraso do pagamento das contrapartidas, o que gerou desinteresse por parte dos empresários.

### **Principais Lições Gerais do Projeto**

#### **Pontos Fortes**

- Arranjo institucional aplicado para a gestão do PDRS adequado, tanto no tamanho quanto na integração da equipe;
- Integração da UGP a um órgão com poder de decisão, onde as gerências vinculadas possuem autonomia;
- Líder do projeto atuante, garantido o bom andamento das atividades e a integração das equipes;
- Equipes focadas no desenvolvimento do projeto, deixando de lado as vaidades pessoais e a disputa por poder;
- Confiança mútua entre as gerências;
- Melhora nos aspectos gerenciais com a mudança da empresa gerenciadora do projeto. Mas deve-se considerar o risco - havendo troca no gerenciamento, caso a nova empresa não se adeque a filosofia de trabalho já existente na equipe;
- Interação entre a Comissão de Licitação e o Controle Interno, melhorando o andamento das aquisições gerais do projeto. Deve-se considerar como ganho de agilidade devido a Comissão de Licitação ser no próprio Órgão Rodoviário;
- Minimização de problemas com a capacitação dos setores envolvidos no processo (controle interno e auditoria);
- Capacidade de adaptação, garantindo um desempenho satisfatório, mesmo com as dificuldades financeiras relacionadas ao câmbio e aos atrasos das contrapartidas (estas dificuldades precisam ser consideradas para os próximos projetos).
- Reforço institucional através de consultores, garantindo segurança e equilíbrio ao projeto, além de apoiar a integração com outros setores envolvidos, utilizando-se de métodos democráticos e participativos.
- Aplicação de treinamentos, gerando uma melhoria na qualidade dos serviços.

#### **Pontos Fracos**

- Dificuldade de acesso à informação, que poderia ser resolvido com um sistema integrado;
- Falta de compreensão do escopo total do projeto por parte de todas as equipes;
- Modelo para contratação de treinamentos (incluindo pessoa física) complicado, o que compromete a execução. Melhoraria com a formulação de pacotes maiores;
- Necessidade de uma reserva financeira para garantir a execução dos contratos no período sem orçamento;
- Critérios utilizados para medição das obras pouco definidos;
- Critérios para medição das vigas deve ser revisto (percentuais pagos por fase).

### **Principais Lições do Componente Rodoviário**

#### **Pontos Fortes**

- A contratação de uma fábrica para a construção das vigas gerou um ganho de escala que barateou o preço das mesmas;
- Apresentação de alternativas aos projetos-tipo estabelecidos, com mais opções de construção, inclusive nas extensões dos aterros de encabeçamento das pontes e de cobertura dos bueiros, de forma de adequá-los às condições diferenciadas encontradas no campo;

- Na fase de construção, emissão das OS's iniciais para as empresas construtoras somente depois de confirmar se os equipamentos e pessoal apresentados são adequados e suficientes para as obras;
- Respeito do Edital e só dar a obra como concluída depois de atendidas às recomendações indicadas pela Diretoria de Meio-ambiente;
- Todos os contratos de obras foram executados sem aditivo de preços, o que é raro;
- Uma vez sendo regularizados os pagamentos, a resposta das empresas foi bastante positiva e o cronograma final para a conclusão do projeto foi cumprido.

#### Pontos Fracos

- A não inclusão de bueiros celulares ou galerias, mais baratos, de mais simples execução (seções pré-moldadas) e com seção pré-fixada como alternativa às pontes de 5 metros.
- O número reduzido de fiscais nas obras impossibilitando o controle mais apurado, que acaba por comprometer a qualidade da execução.
- Faltou dar maior importância as condições das instalações da empreiteira na obra, principalmente, quando ao local de confecção dos bueiros, observando as condições de execução e os materiais empregados.
- A inclusão de pontos de controle para que a fiscalização pudesse dar aprovação a algumas etapas da obra, como a cota de fundação dos pilares, por exemplo, e só então autorizar a continuidade.
- O excessivo número de contratos de execução, um por município, fazendo com que empresas menores, com menor experiência e capital, obtivessem contratos.
- Obras executadas em estradas estreitas, até com 4 metros de largura, entre cercas, o que veio a criar dificuldades, principalmente para a drenagem superficial. Os municípios deveriam estabelecer uma largura mínima, de 6 a 8 metros, como condição para melhoramentos e manutenção.
- A pouca atenção dada ao item Melhoria de Greide, aplicada a somente em alguns poucos pontos notadamente críticos. Posteriormente, pode-se observar a necessidade de maiores extensões para garantir a perenidade do tráfego.
- Ampliação da aplicação de revestimento primário, em todos os trechos que tiverem recebido obras, exceto nos que já possuem e, naturalmente, nos que sofreram Melhorias no Greide.
- Percorrer os trechos escolhidos nas Audiências Públicas, com o projetista para que o Órgão possa ter conhecimento prévio estimado das obras que serão necessárias.
- Cobrar da Supervisora maior atenção para as condições de trabalho, por vezes precárias, infringidas aos trabalhadores.

#### Meio-Ambiente:

O componente ambiental do PDRS foi definido no Macro-componente Consolidação do Sistema de Proteção Ambiental e Gestão Territorial composto pelas ações e atividades consideradas prioritárias que foram extraídas do Plano Estratégico para a Gestão Territorial do Tocantins.

O Macro-componente foi estruturado para estabelecer um processo de compatibilização das atividades de uso dos recursos naturais e ocupação do espaço territorial, com as características e qualidade dos ambientes natural e antropogênico, visando permitir a derivação de bem estar para todos os grupos humanos envolvidos e que, ao mesmo tempo, seja sustentável, através da conservação dos recursos para as futuras gerações.

A Consolidação do Sistema de Proteção Ambiental e Gestão Territorial foi centrada no ZEE e contemplou um grande leque de ações inter-relacionadas e interdependentes, que foram realizadas considerando todo o Estado, através de Áreas Prioritárias que englobam Regiões Administrativas / Áreas-programa, segundo uma seqüência de realizações estabelecidas em função de decisões do governo e/ou por demanda social. As ações foram agrupadas em oito componentes:

- planejamento do uso/ordenamento da ocupação das terras no Tocantins com participação social;
- promoção do crescimento e aperfeiçoamento do capital social;
- preservação da biodiversidade, proteção de ecossistemas e habitats no Tocantins;
- aprimoramento do conhecimento sobre recursos naturais e socioeconômicos;
- regulação e incentivo do uso da terra;
- monitoramento socioambiental;
- manutenção do sistema de proteção ambiental e de uso das terras e

- administração e marketing do sistema de GTER do Tocantins.

#### Pontos Fortes

- Foram feitos os estudos da Dinâmica da Cobertura e Uso da Terra, o Mapeamento das Regiões Fitoecológicas e Inventário Florestal – trazem a combinação de técnicas de interpretação de imagens de satélites, a manipulação de dados socioeconômicos, análises de especialistas, e fundamentalmente, exaustivos levantamentos de campo. Os produtos gerados no trabalho permitiram a qualificação e quantificação dos diversos tipos de usos das terras e dos remanescentes de vegetação nativa, além disso, foram identificados os fatores ambientais e socioeconômicos que interferiam na dinâmica de uso do espaço regional. Tais informações permitem o subsídio à compartimentação do planejamento e uso da paisagem (zoneamento ecológico-econômico), de forma a apoiar as políticas de gestão / ordenamento territorial, tanto em termos de conservação e proteção ambiental, quanto de expansão / consolidação das atividades produtivas, especialmente agropecuárias. Auxiliará também a definição de ações estratégicas para definição de investimentos em agropecuária, silvicultura e industrialização, potencializando o desenvolvimento do estado.
- Foram instaladas estações meteorológicas que permitiram melhorar o monitoramento das condições climáticas no Estado;
- Foi melhorado o gerenciamento ambiental do Tocantins a partir da elaboração de estudos, planos e programas e a criação de Políticas para segmentos vitais ao desenvolvimento do Estado.
- O tratamento da gestão ambiental no PDRS deve servir de molde para as obras da conservação rodoviária de estradas não pavimentadas do Órgão Rodoviário. O licenciamento simplificado e uma gestão ambiental enxuta possibilitaram a execução de um número muito grande de obras, com somente 2 denúncias e 1 processo no Ministério Público Federal.

#### Pontos Fracos

- Houve descompasso de informação entre Projeto licenciado no NATURATINS e o que foi executado. Foram comuns as alegações de desconhecimento de detalhes e recomendações técnicas do Projeto Executivo e do Projeto Ambiental por parte dos responsáveis pelas obras;
- O Estado não conseguiu implementar os indicadores propostos pelo PDRS.

### **Desenvolvimento Regional**

#### Pontos Fortes

- A elaboração das agendas, diagnósticos e planos de desenvolvimento local representou uma etapa importante no conhecimento dos principais aspectos dos municípios, subsidiando a formulação dos PPA's 2004/2007 e 2008/2011 do Estado do Tocantins;
- A criação e fortalecimento dos CMDR's – Conselhos Municipais de Desenvolvimento Sustentáveis foram importantes para o posterior estabelecimento dos Fóruns de Desenvolvimento Regional, o que proporciona legalmente o acesso das comunidades a determinadas políticas públicas, principalmente do Governo Federal, desta forma o Projeto contribuiu para potencializar os recursos destinados as comunidades, notadamente, nos Ministérios do Desenvolvimento Agrário e da Integração Nacional, por meio dos Programas Territórios da Cidadania e Mesorregiões, todos nas áreas de abrangência do PDRS (Bico do Papagaio, Jalapão e Sudeste);
- O Plano Estratégico Regional da Região Sudeste subsidiou a elaboração do PPA 2008/2011 Estadual e o da Região Nordeste, apresentado em julho/2011, subsidiou a elaboração do PPA 2012/2015, o que ao nosso entender representou uma boa oportunidade de melhor entendimento da dinâmica regional e, por conseguinte a formulação de políticas públicas calçadas na realidade local;
- A estrutura das Unidades Técnicas Regionais UTR, incluindo instalações, equipamentos, automóveis, etc., foi apropriada para o desenvolvimento das atividades nas regiões;
- As capacitações dos servidores municipais e estaduais contribuíram para um melhor entendimento da importância das Políticas de Desenvolvimento Regional e os principais instrumentos técnicos de análise regional. As empresas contratadas tinham a devida competência e experiência e os conteúdos e a linguagem apropriados. A participação dos servidores estaduais foi efetiva e com resultados importantes em relação à elaboração de Projetos e do Plano Plurianual, que tem proporcionado o fortalecimento das equipes de Planejamento nos Órgãos Setoriais e ampliado as discussões transversais e um modelo de gestão para resultados.

#### Pontos Fracos

- Os produtos gerados foram amplamente utilizados pelo poder público Estadual, mas não foram internalizados da mesma forma na elaboração dos PPA's municipais, inclusive como material de pesquisa

pelo poder público local. Por outro lado forneceu elementos de discussão/debate para os Conselhos e Fóruns (informação/formação do capital social) para reivindicar ações estabelecidas nos Planos para o desenvolvimento local e regional.

- Apesar da estrutura apropriada das Unidades Técnicas Regionais – UTR e da boa formação acadêmica dos servidores selecionados, estes possuíam pouca experiência na administração pública e na interação entre grupos, ou seja, a equipe foi se habilitando no desenvolvimento dos trabalhos. Desta forma entendemos que é necessária uma qualificação/aperfeiçoamento inicial da equipe da Seplan e uma definição objetiva das atribuições e missão das UTR's, inclusive para dimensionar a equipe necessária para o desenvolvimento das atividades.
- A criação de consórcios intermunicipais foi comprometida devido ao Estado não tem governabilidade plena, pois os municípios possuem autonomia para aceitar e ainda dependem de aprovação nas Câmaras Municipais, desta forma o Estado no PDRS não conseguiu estabelecer um modelo jurídico e de incentivos/desincentivos financeiros aos municípios para formação de consórcios, limitando-se a reuniões com Prefeitos e Secretários Municipais, necessárias, mas não suficientes para o estabelecimento de Consórcios.

#### **Avaliação do Desempenho do Banco Mundial e Lições Aprendidas**

A avaliação feita do desempenho do Banco Mundial considerou os aspectos gerais nas fases de preparação e supervisão:

- Durante a preparação do projeto as discussões técnicas e o apoio para a elaboração do projeto foram muito produtivas;
- O relacionamento durante a preparação foi muito bom, podendo o Banco ser considerado um excelente parceiro;
- Ao longo da supervisão do projeto, o relacionamento foi melhorado;
- A partir do reconhecimento técnico da equipe do projeto houve um aumento da confiança por parte do Banco;
- Durante a supervisão, o Banco foi presente e atuante, colaborando para a conclusão do projeto.

#### **Indicadores de Desempenho**

##### **Macrocomponente: Planejamento e gestão do desenvolvimento regional e local**

**INDICADOR:** Número de agendas de desenvolvimento municipais finalizadas e preparadas por fóruns municipais de desenvolvimento: 20 até o fim de 2003; 40 até o fim de 2005; 60 até o fim de 2007.

**Indic :** 67

Nos municípios de Mateiros e São Félix do Tocantins foram utilizados seus Planos Diretores, nos quais podem ser encontradas as prioridades econômicas, sociais e ambientais para o desenvolvimento municipal, e que foram construídas com ampla participação da comunidade, desta forma consideramos como agenda de prioridades locais.

O indicador foi apropriado, bem como as estratégias de coleta de dados, com relatórios de progresso e realizações das agendas. No entanto, o acompanhamento dos resultados e divulgação para os conselhos municipais de desenvolvimento rural sustentável e fóruns de desenvolvimento, acompanhou com maior ênfase à evolução das ações das obras e ações de desenvolvimento do PDRS. Como a agenda local possui um conjunto de ações nas áreas de saúde, educação, infraestrutura, segurança pública, meio ambiente, gestão pública, produção, assistência social com responsabilidade nas três esferas de governo (Federal, Estadual, Municipal), ações de responsabilidade da sociedade civil organizada e Instituições para-estatais como SEBRAE, SESI, SENAR e outros, as ações realizadas/não-realizadas não tiveram a mesma sistemática de acompanhamento, o que limitou, por conseguinte a avaliação da execução da política pública estadual e municipal, considerando a eficiência, eficácia e efetividade.

O grande avanço a ser implementado agora será um mecanismo de acompanhamento e de responsabilização dos envolvidos na implementação das agendas.

**INDICADOR:** Número de CONDER pilotos estabelecidos: 2 até o fim de 2005; 4 até o fim de 2006.

**Indic:** 4

A formação de Fóruns regionais depende fundamentalmente da criação e fortalecimento dos CMDR's – Conselhos Municipais de Desenvolvimento Sustentáveis. Na região do Bico-do-Papagaio, foi possível a revitalização de 14 CMDR's e a criação de 4 CMDR's, no Jalapão foram criados 2 CMDR's, na região Sudeste foram criados em todos os municípios os CMDR's (20 conselhos) e na região Nordeste também foram criados

todos os 14 municípios os seus CMDR's. A partir da criação dos conselhos municipais tornou-se possível a criação dos Conselhos de Desenvolvimento Regionais – CONDER's. Foram estabelecidos 2 fóruns, sendo 1 de desenvolvimento municipal na região sudeste até o final de 2008 e 1 na região nordeste ao final de 2010. Na região do Bico do Papagaio e Jalapão por serem integrantes dos Programas Territórios da Cidadania e Mesorregião, do Ministério do Desenvolvimento Agrário e Ministério da Integração Nacional, os fóruns regionais foram estabelecidos com esforços conjuntos das Equipes do PDRS, Ministérios, Prefeituras e Sociedade Civil, desta forma, as Instituições participantes e a sociedade local chegaram ao consenso que não havia a necessidade de criar outro fórum, cujos objetivos são comuns.

**INDICADOR:** Número de agendas de desenvolvimento regional finalizadas: 1 até o fim de 2006 e 04 até o fim de 2008.

**Indic:** 4

Foi elaborado o plano de projetos de investimentos prioritários para o setor produtivo realizado pelo Ministério da Integração Nacional, Governo do Tocantins, Prefeituras Municipais e Sociedade Civil, no Programa das Mesorregiões para o Bico do Papagaio, por isso consideramos como agenda de desenvolvimento regional. As duas outras agendas de desenvolvimento regionais elaboradas, foram para a região Sudeste, em 2008 de forma participativa, que subsidiou a elaboração do PPA Estadual para região 2008/2011 e os PPA's municipais da região para o período 2010/2013. O plano de desenvolvimento regional do Nordeste foi validado com a sociedade local e prefeitos municipais em junho/2011. Na Região do Jalapão, priorizou-se acompanhar as agendas de desenvolvimento local e revisão dos planos diretores, desta forma, não foi possível a elaboração de agendas de desenvolvimento regional.

**INDICADOR:** Número de UTR's estabelecidas: 2 até o fim 2004; 4 até o fim 2006.

**Indic:** 4

Indicador apropriado, estratégia de coleta de dados também. As Unidades Técnicas Regionais foram imprescindíveis para o desenvolvimento de ações de criação dos conselhos municipais, os fóruns regionais e a elaboração das agendas locais e regionais e no processo de articulação entre a Seplan, Prefeituras Municipais e Sociedade Civil. O trabalho conjunto com as consultorias contratadas, proporcionou um aprendizado importante para os técnicos das UTR's e servidores municipais na área de desenvolvimento local. No entanto, as UTR's não foram suficientemente capacitadas para o apoio as administrações municipais nos instrumentos de planejamento, orçamento e finanças, cujas ações foram desenvolvidas, basicamente por técnicos da Seplan. Na reestruturação das UTR's para que estas possam desenvolver suas atividades com maior abrangência e eficiência, torna-se necessário o reforço quantitativo e qualitativo do quadro técnico lotado nas UTR's e sua inserção no conjunto de atribuições da Seplan e das Regiões Administrativas.

**INDICADOR:** Número de consórcios intermunicipais criados: 1 até o fim de 2005; 4 até o fim de 2008.

**Indic:** 0

A criação de consórcios intermunicipais é um processo relativamente complexo e o Estado não tem governabilidade plena, pois os municípios possuem autonomia para aceitar e ainda dependem de aprovação nas Câmaras Municipais. No PDRS o Estado não conseguiu estabelecer um modelo jurídico e de incentivos/desincentivos financeiros aos municípios para formação de consórcios. Foram realizadas reuniões e apresentações para prefeitos, vereadores e secretários municipais, sobre consórcios intermunicipais, principalmente na região Sudeste do Estado, onde verificamos um processo de cooperação (informal) entre os prefeitos municipais para recuperação de estradas vicinais, no entanto, não conseguimos avançar, pois foram alianças pontuais e os prefeitos apresentaram como reivindicação a necessidade de uma contrapartida do Estado, o que não foi possível estabelecer. A instabilidade política (Recurso Contra Expedição De Diploma *RCED*, que culminou com a cassação do Governador, indefinição do mandado do substituto, eleição indireta e mandato de 15 meses, com a eleição do Pres. da Assembléia Legislativa para o Governo do Estado) verificada no período de 2007 a 2010 no Estado atrapalhou sobremaneira a estratégia de criação dos consórcios. Destacamos que alguns municípios receberam patrulhas mecanizadas por meio de emendas parlamentares, mas antes da Lei No. 11.107, de 6 de abril de 2005, que dispõe sobre normas gerais de contratação de consórcios públicos, que estabeleceu as normas gerais para a União, os Estados, o Distrito Federal e os Municípios para contratarem consórcios públicos para a realização de objetivos de interesse comum. Não faltaram exemplos de conflitos judiciais entre os municípios por discordâncias na condução dos trabalhos realizados em formas de parcerias, ou mesmo parcerias informais de curto prazo. Portanto, torna-se imprescindível estabelecer um modelo de consórcios com forte embasamento jurídico, aliança política e

incentivos a sua formação.

**INDICADOR:** Aumento do número de prestação de contas municipais conforme a LRF: 20% até o fim 2005; 30% até o fim de 2008.

**Indic:** 100%

A totalidade dos municípios tiveram um aumento do número de prestações de contas conforme a LRF, apesar que no momento da finalização do PDRS, cerca de 72% dos municípios das regiões do PDRS (total de 67 municípios) cumpriram a Lei de Responsabilidade Fiscal, sendo 72% no Bico do Papagaio, 88% no Jalapão, 79% na região Nordeste e 60% no sudeste. Na região do Bico do Papagaio os municípios de Araguatins, Praia Norte, São Sebastião do Tocantins, Axixá do Tocantins, São Bento do Tocantins e São Miguel não cumpriram o Art. 55,§2º. da LRF e o município de Esperantina não cumpriu os artigos 19, III; 20, III “a” e “b” da LRF; Na região Nordeste os municípios de Wanderlândia e Palmeirante não cumpriram o Art. 55,§2º. da LRF e Campos Lindos não cumpriu os artigos Art. 55,§2º. e 19, III; 20, III “a” e “b” da LRF; na região do Jalapão o município de Lizarda não cumpriu o Art. 55,§2º. da LRF e na região sudeste os municípios de Lavandeira, Taipas do Tocantins, Aurora do Tocantins, Conceição do Tocantins, Chapada de Natividade, Ponte Alta do Bom Jesus, São Valério de Natividade e Taguatinga não cumpriram o Art. 55,§2º. da LRF. O Artigo 55, § 2º. da LRF refere-se ao **RELATÓRIO DE GESTÃO FISCAL – RGF**, que deverá ser elaborado e publicado pelo Prefeito Municipal e Presidente da Câmara, a cada quatro meses, de forma padronizada, conforme modelo determinado pela Secretaria do Tesouro Nacional – STN, e será publicado até 30 dias após o encerramento do período a que corresponder. Os municípios com população inferior a 50.000 habitantes poderão elaborar e publicar o RGF a cada 6 (seis) meses, conforme art. 63, III, desde que façam opção em ato próprio. (Art. 54 e 55 da LRF). **IMPORTANTE:** O descumprimento do prazo da publicidade do RGF, pelo Executivo ou Legislativo, sujeita o município a não receber transferências voluntárias e não contratar operações de crédito, bem como, às sanções previstas na Lei dos Crimes Fiscais. Os artigos 19, III; 20, III “a” e “b” da LRF referem-se a **GASTOS COM PESSOAL** - Na LRF, há limites de gastos com pessoal, como percentual das receitas, para os três Poderes da União, dos Estados, do Distrito Federal e dos Municípios, assim distribuídos: Nos Municípios, os limites máximos para gastos com pessoal (60% da Receita Corrente Líquida) serão:

- 6% para o Legislativo;

- 54% para o Executivo

Se o governante verificar que ultrapassou os limites para despesa de pessoal, deverá tomar providências para se enquadrar, no prazo de oito meses. Mas, se depois disso, continuarem a existir excessos, ele sofrerá penalidades.

**INDICADOR:** Sistema de planejamento estadual fortalecido ao final de 2008.

**Indic:** Sim

O Projeto contribuiu para esta melhoria ao suprir apoio específico de consultores, por exemplo, para definir o PPA e Estratégia do Estado, e um número de treinamentos de pessoal para monitoramento & avaliação e administração pública.

#### **Macrocomponente: Gerenciamento ambiental do Estado**

**INDICADOR:** Número de zoneamentos regionais prontos: 3 até o fim 2005; 6 até o fim de 2008.

**Indic:** 4

O objetivo foi parcialmente alcançado, tendo em vista que:

- (i) embora tenha havido uma discordância no início quanto à abordagem conceitual, houve significativos avanços quanto à estratégia de abordagem, que resultou na elaboração de um novo Termo de Referência;
- (ii) a evolução conceitual confluiu em uma execução integral para todo o território tocantinense, em vez de vários trabalhos locais menores, assim foram executados dois grandes estudos que geraram três ferramentas para ordenamento territorial do Tocantins – 1 - Estudo da Dinâmica da Cobertura e Uso da Terra, 2 - Mapeamento das Regiões Fitoecológicas e Inventário Florestal; 3 – Plano de Uso da Vegetação.

Assim sendo, foi conduzido um total de 4 zoneamentos locais/instrumentos.

**INDICADOR:** Número de áreas protegidas a ser estabelecida até o fim 2008: 6.

**Indic:** 0 (18 com 90% concluída)

O objetivo foi parcialmente alcançado, tendo em vista que pela primeira vez, foi possível identificar as áreas prioritárias para conservação da biodiversidade no Estado, avaliar os condicionantes socioeconômicos e as



tendências atuais da ocupação humana do território tocantinense, bem como formular as ações mais importantes para conservação dos nossos recursos naturais. No final do trabalho, foram escolhidas 18 áreas superando as metas inicialmente previstas. Considerando que se chegou a um estágio avançado no processo de estabelecimento de Unidades de Conservação, ou seja, mais de 90% do processo foi realizado, uma vez que a etapa subsequente dependerá apenas de consultas públicas e da edição de Lei específica.

**INDICADOR:** Ferramentas de gerenciamento do uso da terra aprovadas e em uso até o fim de 2008.

**Indic:** 100%

O objetivo foi alcançado, pois a discussão dos 'instrumentos operacionais' imagens de satélite evoluiu para a execução dos serviços técnicos especializados de: (i) Estudo da Dinâmica da Cobertura e Uso da Terra, bem como de (ii) Mapeamento das Regiões Fitoecológicas e Inventário Florestal do Estado do Tocantins. Ressalta-se que os produtos de tais trabalhos serviram como instrumento das políticas de planejamento de uso e conservação das terras do Estado do Tocantins, considerando-se tanto as práticas produtivas quanto as ações de licenciamento conduzidas pelo Naturatins.

**Macrocomponente: Melhoramento e conservação de rodovias estaduais e municipais**

**INDICADOR:** Eliminação de 85% dos pontos críticos das principais redes de estradas municipais até o fim de 2008.

**Indic:** 95%

A utilização deste indicador foi bastante apropriada, pois através dele foi possível acompanhar o andamento das obras e verificar sua execução real, podendo ser atendidos próximo de 5000 pontos críticos.

**INDICADOR:** Tráfego de conexão a rodovias melhoradas e aumentadas em 15% até o fim de 2008.

**Indic:** 200% (15% ao ano)

Este incremento deve-se ao fato do aumento da frota do Estado em virtude do crescimento da população e da melhoria da malha rodoviária Estadual e principalmente municipal a partir da implementação do PDRS.

**INDICADOR:** Melhoria em 120 km de conexão de rodovias e aumentado em 15% até o fim de 2008.

**Indic:** 143km

Ao total foram atendidos 143 Km de rodovias com eliminação de pontos críticos e reabilitação. Os trechos beneficiados foram Dianópolis/Conceição do Tocantins e Palmas-Paraíso do Tocantins.

**INDICADOR:** Fortalecimento da capacidade de planejamento, operação e monitoramento do DERTINS até o fim de 2007.

**Indic:** 100%

A malha estadual (pavimentada e não-pavimentada) foi inteiramente georeferenciada, e o órgão mantém e atualiza por meios próprios esse banco de dados.

O sistema de conhecimento de tráfego (volume médio diário de veículos, por tipo de veículo) 100% implantado. O sistema também é mantido pelos próprios funcionários.

Foram feitos 2 exercícios de avaliação da condição dos pavimentos para toda malha pavimentada estadual, com plena participação de funcionários das áreas técnica e de conserva.

Treinados mais de 200 funcionários em diversos temas técnicos e gerenciais, segundo sete categorias (Administrativa e Financeira, Construção e Manutenção de Rodovias, Georeferenciamento, Meio Ambiente, Operação e Segurança, Planejamento rodoviário e Informática). Um subproduto positivo não previsto originalmente foi o elevado grau de satisfação demonstrado pela maior parte dos(as) treinandos(as) em termos de percepção de sua valorização.

**INDICADOR:** Assinatura de 2 contratos piloto de manutenção de estradas estadual (1000km) e municipal (1000km) até o fim de 2006.

**Indic:** 0

O valor do componente foi estimado no PAD em US\$ 4,6 milhões. Os contratos-piloto para as estradas municipais (vicinais, não pavimentadas) foram excluídos após exame dos prós e contras. O principal fator (contra) foi a vulnerabilidade dessas vicinais aos fatores climáticos adversos e aleatórios, e a tendência do setor privado em embutir tais riscos nos seus preços propostos. O valor de US\$ 4,6 milhões, após exercícios de simulação efetuados, seria suficiente para menos de 1.000 km nos quais constassem serviços de restauração + 3 anos de conserva. Uma rodovia prioritária, e já em estágio de degradação acelerada em alguns segmentos

foi selecionada (TO-080, Palmas - Paraíso, de 53 km). Dado o limite dos recursos somente o projeto de restauração foi contratado. A implantação dessa restauração foi contratado e finalizado.

### **Conclusão**

O Projeto de Desenvolvimento Regional Sustentável permitiu a introdução de melhorias significativas em três pilares fundamentais no desenvolvimento do Tocantins: planejamento e gestão do desenvolvimento regional e local, gerenciamento do sistema de proteção ambiental e gestão territorial e na conservação de rodovias estaduais e municipais.

A promoção do planejamento e da gestão regional dos programas públicos utilizando critérios técnicos, econômicos e ambientais, bem como o aumento da participação das comunidades fortaleceram: (i) os projetos existentes, com a implantação de quatro conselhos de desenvolvimento regional (Conder) e fóruns locais; (ii) a capacidade gerencial das prefeituras com assistência técnica, capacitação e informação através da criação de quatro unidades técnicas regionais (UTR).

Outro aspecto relevante a ser destacado foi o aumento dos municípios que melhoraram sua prestação de contas e transparência e hoje atendem à Lei de Responsabilidade Fiscal (LRF), alcançando o índice de 72% na data de 31 de Outubro de 2011.

No caso do PDRS, os indicadores não conseguiram representar os avanços significativos obtidos nas áreas de meio ambiente, recursos hídricos e irrigação: os estudos estratégicos elaborados, que ampliaram o acervo técnico existente, vão de instrumentos de planejamento, como os Planos de Recursos Hídricos, o Plano Diretor de Irrigação e os Programas Ambientais de Conservação e uso Sustentável da Biodiversidade, a estudos técnicos específicos sobre águas subterrâneas e adensamento da rede hidrometeorológica estadual; e, de forma incontestável, as conquistas na capacitação das equipes, na mobilização da sociedade e no fortalecimento das instituições envolvidas.

Pela primeira vez, foi possível identificar as áreas prioritárias para conservação da biodiversidade no Estado, avaliar os condicionantes socioeconômicos e as tendências atuais da ocupação humana do território tocaninense, bem como formular as ações mais importantes para conservação dos nossos recursos naturais. No final do trabalho, foram escolhidas 18 áreas.

Foi possível também a construção de políticas públicas ambientais e de apoio ao desenvolvimento sustentável, como a de proteção a fauna, de pesca e de irrigação, assim como para implementação dos instrumentos de gerenciamento, notadamente a outorga de direito de uso dos recursos hídricos. Diversas ações, implementadas com recursos financeiros do Banco, impulsionaram a mobilização social para formação de organismos de bacias hidrográficas, como encontros de capacitação e treinamento.

Os resultados obtidos no Componente de Melhoramento e Conservação de Rodovias, facilitaram consideravelmente os acessos às áreas produtivas nas regiões do Projeto (Bico do Papagaio, Nordeste, Jalapão e Sudeste – as mais pobres do Estado, menor IDH). Elas integraram essas áreas com o sistema rodoviário principal, melhoraram a competitividade dos seus produtos, e a acessibilidade de suas populações. Na dimensão institucional, o projeto contemplou um leque de ações voltadas a modernizar a gestão do órgão rodoviário do Estado.

O Tocantins classifica como totalmente satisfatório os resultados obtidos pelo PDRS e a parceria estabelecida com o Banco Mundial para o desenvolvimento Estado.

**Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders**  
NOT APPLICABLE

**Annex 9. List of Supporting Documents**

Annex 10. MAP

