

Document of
The World Bank

Report No: ICR 4031

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IBRD-76540)

ON A

LOAN

IN THE AMOUNT OF US\$46 MILLION

TO THE

STATE OF CEARÁ

WITH A GUARANTEE FROM THE FEDERATIVE REPUBLIC OF BRAZIL

FOR A

CEARÁ REGIONAL ECONOMIC DEVELOPMENT PROJECT
CIDADES DO CEARÁ

May 15, 2017

Social, Urban, Rural, and Resilience Global Practice
Brazil Country Management Unit
Latin America and Caribbean Region

CURRENCY EQUIVALENTS

Exchange Rate Effective February 13, 2017

Currency Unit = Brazilian Real (BRL)

BRL 1.00 = US\$ 0.32

US\$ 1.00 = BRL 3.10

FISCAL YEAR

January 1 – December 31

ABBREVIATIONS AND ACRONYMS

ADECE	Development Agency of Ceará	<i>Agência de Desenvolvimento do Ceará</i>
BNDES	Bank for Economic and Social Development	<i>Banco de Desenvolvimento Econômico e Social</i>
CAIXA	Federal Public Bank	<i>Caixa Econômica Federal</i>
CENTEC	Center for Technology Education Institute	<i>Instituto Centro de Ensino Tecnológico</i>
COFIEIX	Commission on External Financing	<i>Comissão de Financiamentos Externos</i>
CPS	Country Partnership Strategy	<i>Estratégia de Parceria do País</i>
CRAJUBAR	Crato – Juazeiro do Norte – Barbalha	
DER-CE	Department of Roads of Ceará	<i>Departamento de Estradas de Rodagem do Ceará</i>
EA	Environmental Assessment	<i>Avaliação Ambiental</i>
FMR	Fortaleza Metropolitan Region	<i>Região Metropolitana de Fortaleza</i>
FRL	Fiscal Responsibility Law	<i>Lei da Responsabilidade Fiscal</i>
FUNASA	National Foundation of Health	<i>Fundação Nacional da Saúde</i>
FUNAI	National Indian Foundation	<i>Fundação Nacional do Índio</i>
ICB	International Competitive Bidding	<i>Licitação Competitiva Internacional</i>
IFR	Interim Financial Report	<i>Relatório Financeiro Interino</i>
IPECE	Strategic Economic Research Institute of Ceará	<i>Instituto de Pesquisa e Estratégia Econômica do Ceará</i>
IRR	Internal Rate of Return	
PAC	Growth Acceleration Program	<i>Programa de Aceleração de Crescimento</i>
PPA	Multi-year Investment Plan	<i>Plano Plurianual</i>
PPP	Public Private Partnership	<i>Parceria público-privada</i>
PPIAF	Public Private Infrastructure Advisory Facility	
PROURB	Urban Development and Water Resource Management Project in Ceará	<i>Projeto de Desenvolvimento Urbano e Gestão de Recursos Hídricos no Ceará</i>
SAEC	Municipal Secretary of Water and Sanitation of Crato	<i>Secretaria Municipal de Água e Esgoto de Crato</i>
SCidades	Ceará State Secretary of Cities	<i>SCidades do Ceará</i>
SEBRAE	Brazilian Micro and Small Business Support Service	<i>Serviço Brasileiro de Apoio às Micro e Pequenas Empresas</i>

SECITECE	Secretariat of Science and Technology of Ceará	<i>Secretaria da Ciência e Tecnologia do Ceará</i>
SECUL	Secretariat of Culture of Ceará	<i>Secretaria da Cultura do Ceará</i>
SEINFRA	Secretariat of Infrastructure of Ceará	<i>Secretaria de Infraestrutura do Ceará</i>
SEMACE	State Superintendence of Environment	<i>Superintendência Estadual do Meio Ambiente</i>
SENAI	National Industrial Training Service	<i>Serviço Nacional de Aprendizagem Industrial</i>
SETUR	State Secretary of Tourism	<i>Secretaria do Turismo do Ceará</i>
SDG	Sustainable Development Goal	
<i>Sindindustria</i>	Association of Footwear and Clothing Industries of Juazeiro do Norte and Region	<i>Sindicato das Indústrias de Calçados e Vestuário de Juazeiro do Norte e Região</i>
SOLIBEL	Belmonte Lyrical Society	<i>Sociedade Lírica do Belmonte</i>
TTL	Task Team Leader	<i>Gerente do Projeto</i>
UGP	Project Management Unit	<i>Unidade de Gerenciamento do Projeto</i>
UFCA	Federal University of Cariri	<i>Universidade Federal do Cariri</i>
UNESCO	United Nations Educational, Scientific and Cultural Organization	<i>Organização das Nações Unidas para a Educação, a Ciência e a Cultura</i>
URCA	Regional University of Cariri	<i>Universidade Regional do Cariri</i>

Senior Global Practice Director: Ede Ijjasz-Vasquez

Sector Manager: Ming Zhang

Project Team Leader: Paul Procee

ICR Team Leader: Paul Procee

BRAZIL
Ceará Regional Economic Development Project: *Cidades do Ceará*

CONTENTS

Data Sheet	
A. Basic Information	iv
B. Key Dates.....	iv
C. Ratings Summary.....	iv
D. Sector and Theme Codes	v
E. Bank Staff	vi
F. Results Framework Analysis.....	vi
I. Disbursement Profile.....	xii
1. Project Context, Development Objectives and Design.....	1
2. Key Factors Affecting Implementation and Outcomes	5
3. Assessment of Outcomes.....	12
4. Assessment of Risk to Development Outcome	19
5. Assessment of Bank and Borrower Performance	20
6. Lessons Learned	23
7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners	25
Annexes	
Annex 1. Project Costs and Financing.....	26
Annex 2. Outputs by Component	27
Annex 3. Economic and Financial Analysis	31
Annex 4. Safeguards Compliance and Outcomes	45
Annex 5. Bank Lending and Implementation Support/Supervision Processes	48
Annex 6. Beneficiary Survey Results.....	48
Annex 7. Stakeholder Workshop Report and Results - DA	50
Annex 8. Summary of Borrower's ICR	51
Annex 9. List of Supporting Documents	76
Annex 10: Pictures from Project Investments	77
Annex 11: Map of the Project Area.....	86

BRAZIL
Ceará Regional Economic Development Project: *Cidades do Ceará*

DATASHEET

A. Basic Information			
Country:	Brazil	Project Name:	Ceará Regional Economic Development: <i>Cidades do Ceará</i>
Project ID:	P099369	L/C/TF Number(s):	IBRD-76540
ICR Date:	03/29/2017	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	State of Ceará
Original Total Commitment:	USD 46.00M	Disbursed Amount:	USD 46.00M
Revised Amount:	USD 46.00M		
Environmental Category: A			
Implementing Agencies: Governo do Estado do Ceará - SCidades			
Cofinanciers and Other External Partners: N/A			

B. Key Dates				
Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	03/08/2007	Effectiveness:	03/19/2010	03/19/2010
Appraisal:	06/12/2008	Restructuring(s):		11/28/2014 06/11/2015
Approval:	02/24/2009	Mid-term Review:	03/11/2013	03/11/2013
		Closing:	12/31/2014	11/30/2016

C. Ratings Summary	
C.1 Performance Rating by ICR	
Outcomes:	Moderately Unsatisfactory
Risk to Development Outcome:	Substantial
Bank Performance:	Moderately Unsatisfactory
Borrower Performance:	Moderately Unsatisfactory

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

C.3 Quality at Entry and Implementation Performance Indicators			
Implementation Performance	Indicators	QAG Assessments (if any)	Rating
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:	Moderately Satisfactory		

D. Sector and Theme Codes		
	Original	Actual
Major Sector/Sector		
Public Administration		
Sub-National Government	21	21
Transportation		
Rural and Inter-Urban Roads	12	45
Urban Transport	11	19
Water, Sanitation and Waste Management		5
Waste Management	15	0
Industry, Trade and Services		
Other industry	41	20

Major Theme/Theme/Sub Theme		
Environment and Natural Resource Management		
Environmental Health and Pollution Management	9	9
Air quality management	3	3
Soil Pollution	3	3
Water Pollution	3	3
Finance		
Financial Infrastructure and Access	10	10
MSME Finance	10	10
Private Sector Development		
Enterprise Development	10	10
MSME Development	10	10
ICT	13	13
ICT Solutions	13	13
Public Sector Management		

Public Administration	6	6
Administrative and Civil Service Reform	2	2
Municipal Institution Building	4	4
Urban and Rural Development		
Urban Development	52	52
Urban Infrastructure and Service Delivery	52	52

E. Bank Staff

Positions	At ICR	At Approval
Vice President:	Jorge Familiar Calderon	Pamela Cox
Country Director:	Martin Raiser	Makhtar Diop
Practice Manager:	Ming Zhang	Guang Zhe Chen
Project Team Leader:	Paul Procee	Ming Zhang
ICR Team Leader:	Paul Procee	
ICR Primary Author:	David Nathan Sobel	
	Chris Parel	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)

The objectives of the Project are: (a) to promote economic development; (b) to improve urban infrastructure; and (c) to enhance regional management capacity, all in the Borrower's Central Cariri Region.

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

N/A

(a) PDO Indicator(s)

Note: The reviewed indicator is presented on the top line. In instances where the 2015 Restructuring added or modified an indicator or the target, the modification from the original in the PAD is presented in the comment field.

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1:	Percentage reduction of average morning peak hour travel time between defined action points in central Juazeiro do Norte			
Value	20' 89"	15%	30%	N/A
Date achieved	02/24/2009	12/31/2014	11/30/2016	11/30/2016
Comments (incl. %)	Not Achieved: The Bypass was not completed during Project implementation or the ICR preparation, so no reduction in travel time could be measured nor would it be			

achievement)	attributable to the Project. The reduction in travel time will be measured and reported by the Government when works are completed.			
	Revised indicator target: The Restructuring revised the target from 15% to 30%.			
Indicator 2:	People provided with access to "improved sanitation facilities" under the project			
Value	0		12,000	3,000
Date achieved	02/24/2009		11/30/2016	11/30/2016
Comments (incl. % achievement)	Partially Achieved: The full 16 km sewerage network has been completed, though only 3,000 people have been connected. Completion of the balance of residents is expected by late 2017.			
	New indicator: Core indicator added by the Restructuring.			
Indicator 3:	People provided with access to "improved sanitation facilities" – urban			
Value	0		12,500	3,000
Date achieved	02/24/2009		11/30/2016	11/30/2016
Comments (incl. % achievement)	Partially Achieved: The full 16 km sewerage network has been completed, though only 3,000 people have been connected. Completion of the balance of residents is expected by late 2017. The Government will provide updates on progress to the Bank.			
	New indicator: Core sub-indicator added by the Restructuring.			
Indicator 4:	Percentage increase in number of tourists that visit Cariri Central % increase in number of tourists that visit Cariri Central per month/year			
Value	1,173,342	20%		56.7%
Date achieved	02/28/2010	12/31/2014		11/30/2016
Comments (incl. % achievement)	Achieved: In 2015 the Cariri Central region received 1,838,532 tourists or a 56.7% increase over baseline. The measured number of ‘tourists’ to the Cariri region increased significantly, though data cannot be disaggregated to determine the purpose or motivations for travel. The increase is not directly attributable to the Project.			
	Revised baseline: The baseline provided by SETUR was revised by the Restructuring from 360,000 (2007 data) to 1,173,342 (2010 data).			
Indicator 5:	Operationalization of a Regional management model for the Central Cariri			
Value	Regional management model not developed	Regional management model operational		Consultative committee established, with irregular meetings.
Date achieved	02/24/2009	12/31/2014		11/30/2016
Comments (incl. % achievement)	Partially Achieved. The Consultative Committee was established, though it met only irregularly, no meetings have taken place since 2015, and it is not clear that meetings will resume in the near term. The borrower, with close Bank support, prepared a request for proposals for an Integrated Urban Development Plan for the Cariri Metropolitan Region, though bidding has not begun.			
	Revised definition: The definition of the target was modified by the Restructuring as			

	follows: (i) Consultative Committee established and roles defined; (ii) regular meetings of the Consultative Committee (every 4 months).			
Indicator 6:	Roads constructed, non-rural			
Value	0		21.0 km	21.9 km
Date achieved	02/24/2009		11/30/2016	11/30/2016
Comments (incl. % achievement)	<p>Achieved: The value reported includes the Barbalha Bypass; streets in the <i>Seminário</i> District; sections 1, 2, and part of 3 of the Juazeiro do Norte Bypass; roads in Crato, Bela Vista, and Missão Velha. The Juazeiro do Norte Bypass was not completed during implementation, though is expected to be finished by mid-2017.</p> <p>New indicator: Core indicator added by the Restructuring.</p>			
Indicator 7:	Roads rehabilitated, Non-rural			
Value	0		6.0 km	7.67 km
Date achieved	02/24/2009		11/30/2016	11/30/2016
Comments (incl. % achievement)	<p>Achieved: The value reported includes rehabilitation of roads in Farias Brito, central Crato, the historic center of Barbalha, and Jardim.</p> <p>New indicator: Core indicator added by the Restructuring.</p>			
Indicator 8:	Percentage of solid waste disposed properly in the regional sanitary landfill			
Value	0%	85%		
Date achieved	02/24/2009	12/31/2014		
Comments (incl. % achievement)	Dropped by Restructuring as the Project no longer financed the landfill.			
Indicator 9:	Percentage of annual footwear pairs produced in Cariri			
Value	70 million	11%		
Date achieved	02/24/2009	12/31/2014		
Comments (incl. % achievement)	Dropped by Restructuring as the Project no longer supported activities related to the footwear cluster.			

(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
Indicator 1:	Completion of São Jose Seminary area improvement			
Value	0%	100%	100%	100%
Date achieved	02/24/2009	12/31/2009	11/30/2016	11/30/2016
Comments (incl. % achievement)	Achieved: Urban upgrading works were completed in the <i>Seminário</i> District, leading to markedly improved quality of life for local residents. Sewerage connections for			

achievement)	approximately 9,000 residents are expected to be finished by late 2017.			
Indicator 2:	Percentage of actions from the Integrated Sustainable Tourism Development Plan specified in the Annual Budget Law of the State or Municipalities			
Value	0	10	30%	0%
Date achieved	02/24/2009	12/31/2016	11/30/2016	11/30/2016
Comments (incl. % achievement)	<p>Not Achieved: Although ten priority actions have been identified, none of them have been initiated or formally included in the budget.</p> <p>New indicator. Added by Restructuring to replace the indicator for “Number of courses focusing on tourism cluster offered by Project.”</p>			
Indicator 3:	Adoption of a new management model based on the Geopark Business Plan			
Value	0	10	No	Yes
Date achieved	02/24/2009	12/31/2014	11/30/2016	11/30/2016
Comments (incl. % achievement)	<p>Not Achieved: The business plan was developed but has not been implemented. The UGP is exploring alternative management models, including the use of a private operator, based on the dialogue fostered by the Project.</p> <p>New indicator. Added by Restructuring to replace the indicator “Implementation of Geopark Initiatives.”</p>			
Indicator 4:	Number of municipal officials in the Cariri region benefiting from training financed by the project			
Value	0	10	450	478
Date achieved	02/24/2009	12/31/2014	11/30/2016	11/30/2016
Comments (incl. % achievement)	<p>Achieved: Some 487 municipal official received training under the Project. However, no plans are in place to provide ongoing training for these officials or to replicate the one-off courses for other officials, nor is it feasible to determine the impact of the training on job performance.</p> <p>New indicator. Added by Restructuring to replace “<i>Number of courses on public management offered by Project to municipal officials.</i>”</p>			
Indicator 5:	UGP remaining adequately staffed			
Value	85%	100%	Yes	Yes
Date achieved	02/24/2009	12/31/2009	11/30/2016	11/30/2016
Comments (incl. % achievement)	<p>Achieved: The UGP was fully staffed, although it took a while in the early stages of supervision to fully staff the UGP. There were frequent turnovers of project staff, especially the project coordinator, which hampered implementation. Even at the very end there was a change of project coordinator, who left right after completion and before the ICR was finished.</p> <p>Target revised: This indicator was revised by the Restructuring from percentage-based to binary to more closely reflect the idea of the use of the indicator in the context of the evolving needs of the UGP.</p>			
Indicator 6:	Project monitoring reports being generated and analyzed quarterly			

Value	No	Yes	Yes	Yes
Date achieved	02/24/2009	12/31/2014	11/30/2016	11/30/2016
Comments (incl. % achievement)	Achieved: The UGP prepared and submitted timely project monitoring reports.			
Indicator 7:	Number of meetings held by the Project Consultative Committee.			
Value	0	20	20	11
Date achieved	02/24/2009	12/31/2014	11/30/2016	11/30/2016
Comments (incl. % achievement)	Partially Achieved: The consultative committee met a total of 11 times, rather than the targeted 20 meetings. However, the committee has not met since 2015 and meetings are unlikely to resume in the near term.			
Indicator 8:	Establishment of regional consortium for landfill			
Value	No	Yes	Yes	Yes
Date achieved	02/24/2009	12/31/2014	11/30/2016	11/30/2016
Comments (incl. % achievement)	Partially Achieved: The regional consortium was formally established, though there was little ownership for the landfill and members were not able to agree on the terms of the landfill. Financing for the landfill was ultimately dropped from the Project. Nevertheless, the Project provided technical assistance to the government that resulted in the development of a governance model for a regional landfill and corresponding legal instruments that would facilitate private sector participation. The government has indicated that it is interested in implementing the model developed with the support of the Project in another area in the State.			
Indicator 9:	Number of families removed from risk areas in <i>Seminário</i> District			
Value	0	80		89
Date achieved	02/24/2009	11/30/2016		11/30/2016
Comments (incl. % achievement)	Achieved: The UGP successfully resettled 89 families from risk areas. However, 43 families remained in temporary housing at the time of the ICR mission, awaiting permanent homes in a new housing complex built through the <i>Minha Casa Minha Vida</i> program. New indicator: Added by the Restructuring.			
Indicator 10:	Construction and paving of Bypass Road in Juazeiro do Norte			
Value	0%	100%		
Date achieved	02/24/2009	12/31/2014		
Comments (incl. % achievement)	Dropped by Restructuring. Progress on the road is captured by the added PDO indicators 1 and 6.			
Indicator 11:	Implementation of sanitary landfill according to design			
Value	No	Yes		
Date achieved	02/24/2009	12/31/2009		
Comments (incl. % achievement)	Dropped by Restructuring to align with the proposed changes to the Project scope.			

achievement)				
Indicator 12:	Completion of infrastructure for the Tupinamba Mill			
Value	0%	100%		
Date achieved	02/24/2009	12/31/2009		
Comments (incl. % achievement)	Dropped by Restructuring to align with the proposed changes to the Project scope.			
Indicator 13:	Number of activities related to Regional environmental protection strategy completed and being implement			
Value	0	8		
Date achieved	02/24/2009	12/31/2009		
Comments (incl. % achievement)	Dropped by Restructuring to align with the proposed changes to the Project scope.			

G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	05/12/2009	Satisfactory	Satisfactory	0.00
2	11/12/2009	Satisfactory	Satisfactory	0.00
3	04/20/2010	Satisfactory	Satisfactory	0.00
4	02/13/2011	Satisfactory	Satisfactory	0.76
5	08/13/2011	Moderately Satisfactory	Moderately Satisfactory	0.76
6	01/09/2012	Moderately Satisfactory	Moderately Satisfactory	2.41
7	08/13/2012	Moderately Satisfactory	Moderately Satisfactory	8.16
8	03/11/2013	Moderately Unsatisfactory	Moderately Unsatisfactory	11.51
9	12/08/2013	Moderately Unsatisfactory	Moderately Unsatisfactory	12.96
10	07/05/2014	Moderately Satisfactory	Moderately Satisfactory	15.66
11	01/28/2015	Moderately Satisfactory	Moderately Satisfactory	23.06
12	08/18/2015	Moderately Satisfactory	Moderately Satisfactory	29.81
13	03/30/2016	Moderately Satisfactory	Moderately Satisfactory	35.51
14	11/08/2016	Moderately Satisfactory	Moderately Satisfactory	44.80

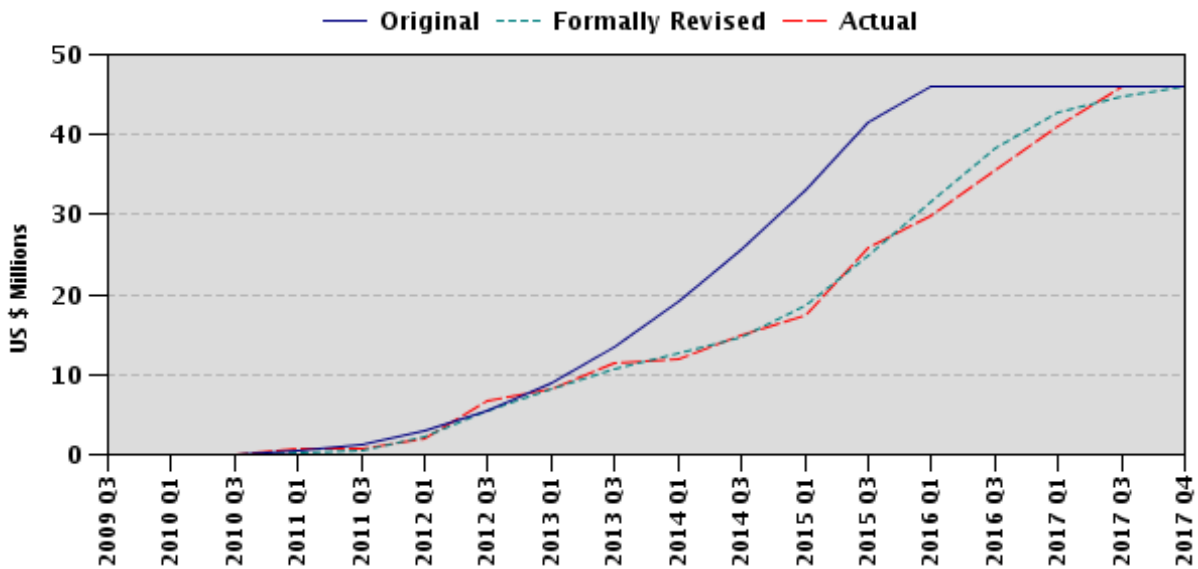
H. Restructuring (if any)

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		

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		
11/28/2014	N	MS	MS	21.73	Extension of the Project closing date by 23 months to allow time for the Government to finish processing the full restructuring.
06/11/2015	N	MS	MS	27.37	Level 2 restructuring to accelerate implementation and increase likelihood of achieving the PDO. Changes: revision of Project Scope; revision of results framework; reallocation of loan proceeds; and adjustment to financing limits by category.

I. Disbursement Profile



1. Project Context, Development Objectives and Design

1.1 Context at Appraisal

1. **Ceará's Urbanization Challenge and Regional Development Strategy.** At appraisal, the State of Ceará was among fastest urbanizing states in the Northeast region, with 71.5 percent of the population residing in urban areas. However, urbanization was taking place unevenly and the vast majority of the growth was happening in Fortaleza and its surrounding areas. This was leading to increased pressures on resources in the Fortaleza Metropolitan Region and regional disparities. Many urban areas in the interior were lagging behind in terms of urban infrastructure, services, and job opportunities to retain population. Therefore, the State worked on identifying development potentials in the state and develop a regional strategy to increase regional competitiveness that would foster economic growth, increase employment and reduce poverty.

2. **The state regional integration strategy was based on three pillars:** (a) decentralization and greater coordination across state entities to maximize impact of synergetic state interventions in a given region, (b) stimulating employment by building on regional economic potential through promoting clusters, innovation, training, public private partnerships and linkages to research institutions, and (c) building capacity of municipal governments to prioritize investment needs, deliver services and improve their business environment. Also, due to the absence of metropolitan-wide institutions, the state played an important role in assisting municipalities, encouraging inter-municipal collaboration, and providing regional infrastructure. The strategy identified six regions within the State: (i) Cariri, (ii) Baixo Jaguaribe, (iii) Vale do Acaraú, (iv) Centro Sul/Value do Salgado, (v) Maciço de Baturité and (vi) Ibiapaba/Vale do Coreaú). These regions accounted for 26 percent of the state's population and 18 percent of its GDP.

3. **The Central Cariri Region was selected as it was a lagging region in a poor state, facing a number of economic development and infrastructure-related challenges.** The Region includes nine municipalities and had a population of approximately 554,000 inhabitants in 2009, or about 7 percent of the state population. When the Project was appraised, nearly 67 percent of the population was considered poor, earning less than 50 percent of the minimum monthly wage of about US\$180. Informal businesses prevailed in the region, most of them connected to commerce, tourism and shoe-making industries. The Human Development Index (2000) was 0.622 for the region, which was lower than the state average (0.699) and much lower than the capital city of Fortaleza (0.786).

4. **CRAJUBAR Region** is the urban center of the Cariri Region, which is formed by the conurbation of the Municipalities of Crato, Juazeiro do Norte and Barbalha, and had a total population of 400,000 inhabitants in 2009. It formed the nexus of the project area in terms of economic development and job creation for the region. It was the magnet of migration with the highest HDI and lowest poverty levels of the Central Cariri Region. CRAJUBAR region lacked coordinated inter-municipal management, as well as a number of critical transport and environmental challenges. Traffic congestion was a major problem due to lack of proper transport planning and basic infrastructure. These problems were exacerbated during the pilgrimage events for Padre Cicero. Among others, deforestation and improper solid waste disposal were apparent. Many of these issues, required inter-municipal coordination, often beyond the CRAJUBAR region, highlighting the need for a comprehensive approach for the entire Central Cariri region.

5. **While facing some critical challenges, the region had significant economic development potential.** Tourism and manufacturing industries, such as footwear, were major drivers of private investment and had potential for further growth. Tourism in the region included a wide variety of

activities ranging from religious to scientific, cultural, ecological and commercial. The main tourist attraction was and continuous to be Father Cicero, an influential Catholic priest who resided in Juazeiro do Norte during the late 19th century and early 20th century. Major events in honor of Father Cicero attract nearly 1.8 million pilgrims each year to the region, mainly from the Northeastern region. Most of the jobs in Juazeiro do Norte were built on religious tourism and a large portion was informal. However, the Cariri region also had other tourism potentials as it held an extensive fossil basin which, under UNESCO's auspices. It led to the creation of the first *Geopark* in the Americas. Finally, given its unique natural features, rich culture, emerging commerce and geographic location, Cariri region was also increasingly becoming a preferred destination for business related tourism and events. Finally, the shoe industry in Cariri was ranked third largest in Brazil, providing nearly 8,000 jobs and accounting for around 40 percent of the shoe firms in the state. Most firms were small and medium sized, often lacking skilled labor, innovation capacity, technical knowledge and market information. With increasing global competition in this sector, it needed upgrading in terms of design, technology, skills, marketing and productivity.

6. **World Bank Engagement.** The project was built on the World Bank's long-standing engagement with the State of Ceará. Among others, the Bank supported nine strategic state-wide programs through the first results based Sector Wide Approach (SWAP, P106765); and a number of IBRD loans supported investments in education, health, rural poverty, water resources management and urban development. In addition, IFC supported a TA program helped simplify administrative process for businesses in several municipalities and the State. At the time of appraisal, the Bank was also preparing a second SWAP that would expand beyond the social sectors to address issues of growth and competitiveness. The Bank had also undertaken analytical work on city competitiveness in Brazil, including the preparation of a case study on the footwear cluster in Brazil that informed the design of the cluster-based development activities under the project.¹ This project was designed to support the SWAP and help to test a cluster-based approach to local economic development, regional integration, and the enhancement of the main secondary and tertiary urban regions in the state. The project was aligned with the Bank's Partnership Strategy for Brazil by: i) investing in growth, notably through the private sector, including enhanced emphasis on improving competitiveness and investing in infrastructure; ii) improving environmental sustainability in the "green" and "brown" environmental arenas; iii) making fiscal adjustment sustainable, enhancing the quality of public spending to deliver services more efficiently, thus also freeing up resources for investment, as well as improving public sector management; and iv) building human capital for improved equity and growth. The project also supports the vision for a more equitable, sustainable and competitive Brazil outlined in Government's Multi-Year Investment Plan (PPA). The Project was addressing common challenges municipalities in Brazil faced in terms of lack of infrastructure, social inequity, environmental vulnerabilities and low productivity and competitiveness.

1.2 Original Project Development Objectives (PDO) and Key Indicators (*as approved*)

7. The original PDO were: (a) to promote economic development; (b) to improve urban infrastructure; and (c) to enhance regional management capacity, all in the Borrower's Central Cariri Region.²

¹ The book 'Competitiveness and Growth in Brazilian Cities: Local Policies and Actions for Innovation', available at <http://elibrary.worldbank.org/doi/abs/10.1596/978-0-8213-8157-1>, explains the analytical work done during project preparation.

² The PAD included a specific reference to the nine municipalities: "... in the Borrower's Central Cariri Region, which includes the nine municipalities of Barbalha, Cariri, Crato, Farias Brito, Jardim, Juazeiro do Norte, Missão Velha, Nova Olinda, and Santana do Cariri."

8. The key indicators were: (i) Percentage reduction of average morning peak hour travel time between defined action points in central Juazeiro do Norte (by 15%); (ii) Percentage of solid waste disposed properly in the regional sanitary landfill (up to 85%); (iii) Percentage increase of annual footwear pairs produced in Cariri; (iv) Percentage increase in annual number of tourists that visit Cariri Central; and (v) Operationalization of a regional management model for the Central Cariri Region.

1.3 Revised PDO and Key Indicators, and reasons/justification

9. The PDO was not revised.

1.4 Main Beneficiaries

10. The PAD did not specify the main beneficiaries of the program, but based on the project description and PDO, the main beneficiaries were the decision makers and staff from the nine municipalities, businesses and workers in the tourism and shoe sectors, tourists, and people living in the vicinity of project investments, such as the *Seminário District* in Crato, the parks and streets in downtown areas of municipalities, and around illegal waste dumps in the region. Indirectly, the project would benefit the population at large in the Crajubar Region through more economic growth and jobs, improved traffic and infrastructure amenities, and solid waste services, and better access to tourist sites.

1.5 Original Components (as approved)

11. The project was divided into three components described below.

12. **Component 1: Infrastructure Improvements (Total: US\$33.1 Million, IBRD: US\$19.5 million)** was focused on investments in infrastructure at the regional and municipal levels of Central Cariri to address critical infrastructure deficits, protect and restore the environment, and improve public services for local residents and tourists. Regional infrastructure included transportation infrastructure to reduce congestion, increase mobility and access to the main tourism sites, and a regional sanitary landfill to provide an environmentally sound disposal site for solid wastes generated in the region. Municipal infrastructure included drainage improvements in environmentally degraded areas, urban center upgrading, upgrading of public spaces used by religious pilgrims, environmental sanitation, and improvements to urban parks.

13. **Component 2: Cluster-based Local Economic Development (Total: US\$23.7 Million, IBRD: US\$17.3 million)**. This component was designed to facilitate the growth of the tourism and footwear clusters in the Central Cariri Region and enhance their competitiveness through business environment improvement, technology upgrading, training and market outreach, and provision of infrastructure for cluster development. Regarding the tourism cluster, the key activities would include setting up Araripe *Geopark* with investments such as visiting and learning facilities, observatory sites, reception facilities, information kiosks, and resting areas; the construction of a regional convention center; support to tourism planning, promotion and marketing, events organization and improvements, and capacity building; and professional facilitation of the tourism cluster process. A transportation and logistics plan would be developed to improve heavy freight traffic patterns and facilitate regional mobility.

14. **Component 3: Regional Management and Institutional Strengthening (Total: US\$9.1 Million, IBRD: US\$9.1 million)** aimed at promoting effective governance at the municipal, regional and state levels. Technical assistance to improve regional management was focused on supporting the Consultative Committee (*Comitê Consultivo*), which served as the main channel for improving coordination and collaboration in the Central Cariri Region, including: implementation of a regional

environment strategy to address regional issues such as solid waste management, water management, sanitation and drainage, and deforestation. Institutional strengthening activities at the municipal level included technical assistance and capacity building activities in areas such as planning, local economic development, project design, appraisal and implementation, including: procurement, M&E), revenue collection, budget and financial management, management of public services, and environmental management. Finally, the component would also support the Secretariat of Cities of the state in fulfilling its mandate to provide financial and technical support for municipal and regional development, and strengthening project supervision by: contracting of local and regional consultants and staffing of UGP (the project management unit), monitoring and evaluation activities, auditing, equipment, technical assistance, training, study tours, and incremental operation cost during project implementation.

1.6 Revised Components

15. In June 2015, the Project was restructured. While Components remained the same, their scope was revised significantly and disbursement ratios and costs estimates were revised. The main change was that Component 2 was greatly reduced in scope, and infrastructure investments were prioritized. The implementation of the cluster-based local economic development activities faced many delays due to lack of ownership and clear local champions from the private sector, despite the extensive consultation process during project preparation. The Association of Footwear and Clothing Industries in Juazeiro do Norte and Region (*Sindindustria*) was involved in coordinating activities, but had difficulties reaching out to micro- and small-enterprises, the main beneficiaries of the project. The UGP also lacked the capacity to successfully implement these activities. As a result, the project was unable to negotiate with key stakeholders and select enterprises that would move to the Technology Center and benefit from equipment upgrading and capacity building activities. The consultancy contract to support the development of the Regional Tourism Plan, the basis of the project support to tourism development in the region, was delayed and most capacity building activities were not realized or implemented directly by the Ministry of Tourism. Activities under this component were focused on infrastructure improvement at the nine sites of the *Geopark*. The Technology Center was transformed into a Multi-Functional Center that now houses a number of state government organizations, including *Vapt-Vupt*³ and the Regional University of Cariri (URCA). Finally, the siting and implementation of the regional landfill faced many difficulties, mostly due to lack of interest and political divergences among the mayors. In addition, the costs to construct the landfill became much higher as a result of considerable increase in costs of construction materials and works, which was felt in the entire Bank portfolio in Brazil. Given the available project budget for the landfill was limited, it was impossible for the project to successfully implement the landfill. Given these problems, the project team together with management decided to prioritize the urban infrastructure investments and increase disbursement ratios as a result of changes in designs and increased costs and overall prices had increased significantly since 2008.

1.7 Other significant changes

16. The project restructuring in June 2015 assigned more funds to the two core investments under Component 1, namely the Urban and Environmental Upgrading in the *Seminário District* in Crato, and the Bypass in Juazeiro do Norte. The design of both investments were changed substantially and overall costs increased substantially. The technology and engineering designs for the slope stabilization project in the *Seminário District* were changed substantially and the alignment of the Bypass was completely revised to reduce resettlement needs and related costs, requiring new engineering designs. As mentioned, a number of activities were reduced in size, including: (i) the infrastructure investments for the *Geopark*

³ *Vapt Vupt* is a “one-stop” service center that integrates 24 state and municipal agencies and offers more than 350 citizen services.

that were undertaken in parallel to the Project by the Ministry of Tourism, and consultancies to market the *Geopark* that were duplicating ongoing effort of this same ministry. The scope of the consultancies tied to improved metropolitan and regional management were also narrowed, as the government was independently implementing training and other activities, as well as focusing the project support to the development of a regional model for solid waste management and a sanitary landfill that could be implemented once the political support is there in the future. Unfortunately, the considerable changes in project scope was not accompanied by a revision of the PDO, which, in hindsight, should have been done as the project had more positive impacts on improving local infrastructure and quality of life.

Table 1. Original allocation and revised allocation after restructuring in June 2015.

	Original Allocation (US\$ Thousands)			Revised Allocation (US\$ Thousands)		
	Total	IBRD Loan	Counterpart Funds	Total	IBRD Loan	Counterpart Funds
Component 1	\$33,100	\$19,500	\$13,600	\$45,260	\$37,040	\$8,220
Component 2	\$23,700	\$17,300	\$ 6,400	\$17,330	\$ 6,020	\$11,310
Component 3	\$ 9,100	\$ 9,100	-	\$ 9,230	\$ 2,930	\$ 6,300
Total	\$66,90	\$46,000	\$20,000	\$71,830	\$46,000	\$25,830

17. The proposed restructuring increased the allocation of Bank funds to urban infrastructure investments in Category 1. The disbursement ratio for the loan was increased to 100 percent for all categories to cover the changes in costs as a result of designs changes and inflation since the appraisal of the project.

18. **Results Framework and Indicators.** As a result of the restructuring, a number of Project and Intermediate Outcome Indicators were revised. A number of indicators related to the regional sanitary landfill, *Tupinambá* Mill, and the footwear cluster were dropped and new core sector indicators, mandated by the Bank, were added to the results framework. Other indicators were revised and baselines were added as explained in more detail in Section F of the Data Sheet.

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry

19. The project was designed to support the State of Ceará in implementing policies in the Cariri Central Region to stimulate regional socio-economic development away from Fortaleza Metropolitan Region and improve infrastructure services in the region. A number of critical infrastructure deficits were identified, as well as investments to protect and restore the environment and improve public services for local residents and visitors. Footwear and tourism clusters were prioritized, and much effort went into identifying investments to enhance regional competitiveness through business environment improvement, technology upgrading, and training and market outreach, as well as infrastructure needs that could support the development of these clusters. While overall the investment choices were based on clear criteria and will support the regional economic development in the long term, several challenges related to the detailed designs and institutional arrangements complicated implementation.

20. Many studies and extensive consultations were carried out to identify and prioritize investments. All proposed investments were based on specific demands from municipalities, established during

regional consultations, and identified in the State's regional development strategy. Other studies researched the main constraints for regional economic growth, which were identified as the existing transport bottlenecks and environmental resource constraints and pollution. During preparation, the team also developed an extensive body of analytical work on the footwear cluster and engaged local and international private sector development experts with extensive experience in cluster development to design the project. In June 2006, an extensive stakeholder consultation process was conducted that included community members, private sector, NGOs and academics to identify bottlenecks, prioritize investments, and discuss the projects with the largest regional impact. Local and regional capacity to implement the activities were considered, and the team ensured that investments were consistent with the Master Plan for Urban Development (*Plano Diretor de Desenvolvimento Urbano - PDDU*), the Multi-Year Investment Plan (*Plano Plurianual - PPA*), and the Master Plan (*Plano Diretor*) of the cities. Finally, overall environmental and social benefits were considered in selecting investments.

21. Despite this extensive body of research, the project experienced key challenges related to a lack of detailed designs in some cases and less than optimal institutional arrangements. While for example extensive criteria were used to identify and prioritize projects, many of the most complex and urgent investments, such as the urban upgrading in the *Seminário District* in Crato and the Bypass in Juazeiro do Norte, lacked detailed designs and environmental and social impact assessments. This meant that actual investment costs and resettlement needs were not well quantified and had to be revised many times during implementation. For the regional landfill, more detailed feasibility studies were prepared, but detailed designs and environmental licensing could not be finalized until a definitive site was selected. The biggest challenge, however, and as such acknowledged by the team, was reaching an agreement among the municipalities; this eventually proved an insurmountable challenge during implementation. Finally, some institutional arrangements did not sufficiently address the complexity of implementation of proposed arrangements. The SCidades team did not have the experience and authority to engage with critical private stakeholders and push the proposed interventions forward. Moreover, although the State Secretary of Tourism (SETUR), the State Secretary of Culture (SECUL) and the Development Agency of Ceará (ADECE) were mentioned in the institutional arrangement in the PAD, in practice they only had a coordinating role and did not directly manage any project funds. As a result, they did not have much ownership and only occasionally got involved during implementation. Important private sector associations and government agencies that could support small business development and training had participated in the consultation processes but lacked clear mandates and resources to implement specific activities and lost interest in the project.

22. Despite these challenges, the incremental infrastructure improvements identified under the project and prioritized by the municipalities proved to be cost-effective and will support economic development in the long-run. Examples are the rehabilitation of parks, sidewalks and streets in historic areas of cities, towns and communities that will directly benefit the local population and increase the potential for tourism. The relatively small investments at nine sites of the *Araripe Geopark* were also quite cost-effective in creating more attractive and accessible areas for local and international tourism

23. In terms of risk, several project risks were correctly identified but ultimately underestimated. For example, the risks related to regional governance with a Regional Consultative Committee were indeed substantial, but even more challenging than expected. In the early stages of project implementation, the committee met with some regularity (though often only to respond to the project demands for a regional strategy for solid waste management), but it lacked strong political ownership by the municipalities or a clear mandate to implement activities. Without a clear solution in sight, the committee basically dissipated and the regional landfill investments were dropped from the project. Implementation capacity at the local level, however, was rightly identified as substantial, and SCidades was designated to supervise and coordinate project implementation. Their involvement was critical for project implementation, but in some cases hampered the full ownership and involvement of cities, which showed greatest interest in the

few investments they had prioritized and less enthusiasm for the regional level activities. This was especially true for footwear and cluster related investments that lacked a true champion at the local level. The project was unable to mobilize local entrepreneurs or effectively engage with private industry associations, which are critical for cluster development. The risks related to the most complex investments of the *Seminário District* and the bypass road in Juazeiro do Norte were also underestimated and likely the result of the lack of very detailed engineering designs and uncertainties regarding the social and environmental safeguard challenges.

24. Finally, although the project rightly identified a number of needs in terms of training, capacity building and strategic planning, many of these plans and training activities were financed during project preparation but without clear identifying roles and responsibilities of different stakeholders beforehand.

25. In conclusion, the extensive efforts by the borrower and the Bank team to engage with key stakeholders and preparing detailed studies helped to identify key areas for investments that would help the project meet its objectives. However, project preparation was extremely long and lacked specific implementation plans and detailed designs that would be ready for bidding at effectiveness. As a result, early stages of implementation were delayed, and scope and size of investments had to change many times throughout the implementation process.

2.2 Implementation

26. During early stages of implementation, the project moved very slowly, and disbursements were negligible during the first 18 months. The loan, approved on February 24, 2009, only became effective more than a year later, on March 19, 2010. Several of the proposed investments were not well-defined or lacked detailed designs. Despite effectiveness delays, many detailed engineering designs and safeguards documentation of key infrastructure investments such as the Bypass in Juazeiro do Norte and the rehabilitation works in the *Seminário District* were only prepared during implementation. For the Bypass, alignment had to be changed to significantly reduce resettlement impacts and make the road financially viable, which meant the scope of this subproject kept changing, causing many delays during project implementation and a gradual increase of costs of investments.

27. Proposed investments such as the rehabilitation of the *Tupinambá* Mill and the implementation of the *Teleférico* (scenic chairlift) in Barbalha were extensively discussed, but ultimately never financed due to environmental safeguard concerns and overall feasibility. In addition, some investments were included that did not have a very clear connection to the PDO, such as the construction of the *Vila da Musica* (Music Village). This construction was included based on a request from the Belmonte Community in Crato to provide the non-profit organization *Sociedade Lírica do Belmonte* (SOLIBEL) with improved facilities for their highly successful music education and social inclusion program for poor and vulnerable children. SOLIBEL donated the land on which the brand new facilities were constructed. The positive impacts of this investment is indisputable and probably will support local economic development, but the causal links is not very clear as social inclusion was the main reason for supporting the facility.

28. Throughout implementation, the regional coordination among municipalities and the mobilization of key private sector associations and local entrepreneurs proved very difficult and time consuming. Especially the implementation of the regional landfill and the cluster-based economic development component suffered from these difficulties, despite great efforts by the team and borrower. Despite the involvement of local and international expert consultants, the Bank team was unable to effectively engage with micro and informal enterprise. Many difficulties existed in transferring equipment to private enterprises, which meant many of the planned activities under Component 2 could not be implemented. Towards the end, doubts existed about the capacity of the project to support the development of a higher-end and more productive footwear cluster, and as part of a project restructuring most of these activities

ended up being dropped. The Technology Center, a building rehabilitated by the project and originally intended to house footwear enterprises and support them with training and better equipment, was adapted to become a Multi-Functional Center and now is the home of a number of governmental organizations and agencies. Finding this alternative use for the building was a noteworthy accomplishment by the Bank and SCidades team, and the center now provides very important services in the region. The Bank team also worked closely with the government to deliver solid infrastructure improvements at *Seminário* District and visitor sites throughout the *Geopark*.

29. For the landfill site, the Bank team engaged a leading Brazilian solid waste management expert to support the site selection and technical designs. Although the landfill also ultimately dropped from the project, the State government plans to use the designs and looks to reengage on this agenda with the new municipal administrations and securing financing for the landfill in the near future. In addition, a regional governance model for the landfill that enables private participation in the management and operation of the landfill and which was developed under the project through a Public Private Infrastructure Advisory Facility (PPIAF) grant and in partnership with a Brazilian law firm, is already used by the state government as a basis to solve the solid waste management problems in the state. Although the landfill was not constructed, the plans and model developed under the project will likely yield benefits for the State in the years to come.

30. The difficulties in engaging with the private sector, particularly on the footwear cluster, were partially the result of the lack of senior officials of the State Government being involved in managing the dialogue between municipalities and private sector and foster the development of the tourism and footwear sectors in the region. Both the Bank and SCidades' team engaged experienced consultants to discuss with critical stakeholders, but without much political support and very little results over time. The core teams on both sides more experience with infrastructure investments, which, at the end, became the main focus of the project.

31. Furthermore, implementation was hampered by the many staff changes on both the borrower and the Bank side. A number of critical staffing positions in the UGP were often vacant and changed frequently. The Bank team also suffered from frequent turnovers. Three task team leaders (TTLs) were involved in project preparation and another five different TTLs managed implementation. These frequent changes have affected the continuity of the dialogue and implementation progress. This was probably most felt in the cluster development (Component 2) and regional management and institutional strengthening activities (Component 3), which by nature require strong leadership, continuous engagement and close coordination.

32. At Midterm Review, the Bank and Government teams designed a proposal to streamline and restructure the Project based on a candid assessment of the slow progress in project implementation. The restructuring justifiably aimed at addressing a number of the above-mentioned problems that the project faced and re-focused investments around the critical infrastructure improvements in Crato and Juazeiro do Norte, which also required an extension of the closing date by 23 months. As a result, the poorly performing Components 2 and 3 were greatly reduced in size and scope. The documentation prepared by the State government to seek Federal approval of the proposed restructuring was rejected twice by the Federal government due to missing or incomplete information. By late 2014 with the original Project closing date of December 31, 2014 fast approaching, the Bank team opted to process the 23-month extension in November 2014. Once approval for the Restructuring from the Federal Government was finally obtained, the full Restructuring of the project was completed in June 2015.

33. The Restructuring was processed as simple changes in allocation of funds to different components, though the change of project scope and lack of progress on the economic development activities arguably would have warranted also changing the PDO and thus processing a Level I

restructuring. As neither the PDO nor the outcome indicators were revised to the new scope of the project, many of the planned results of Components 1 and 2 could actually not be achieved. The Project financed a number of important studies under these components, including the Regional Transit Plan, Regional Master Plan, Institutional Framework for Regional Waste Management, the Management Plan for the *Geopark*, and the Regional Tourism Strategy, but the follow-up and actual implementation of these plans is uncertain, especially with the recent local government changes.

34. At the end, the restructuring was justified and reduction in scope was necessary to cut losses, reallocate investment to large, successful infrastructure projects, and bring this high profile project to a successful end. Implementation performance improved considerably after the restructuring as the project now basically comprised of completing two large civil work projects, both of which will have important benefits for people and the region. The slope stabilization and improvements in the *Seminário District* have greatly reduced environmental risks and improved the quality of life of the local population. Surveys have shown the great satisfaction of the local population with the improvements, which are very evident. The Bypass in Juazeiro do Norte will make an important contribution to improve regional traffic and decongesting downtown Juazeiro do Norte, while improving regional connectivity. The Bypass is being completed and should be fully operational by June 2017. Beyond these large-scale investments, the project also was very successful in making infrastructure improvements in and around the historic downtown areas of cities. This includes creating a Bypass (along an existing road) in Barbalha and upgrades of parks and visitor areas, signage and information on historic buildings (Barbalha) and some small punctual improvements along a religious walking tour – *Roteiro da Fé* – in Juazeiro do Norte, however the tour itself was never formally implemented.

35. Regarding supervision, Bank missions were generally dispatched twice a year and ISRs were done with the same frequency. The rationales for changes in project scope and dropping of activities were not always well documented, and even the restructuring lacked more detailed information to understand the problems and mitigating measures to improve performance. The ISRs in general also portray a quite optimistic picture that focused on short-term progress, but failed to address the longer-term outcomes of the project. The fact that the project had seven task managers cannot have helped implementation performance.

36. On balance, performance during implementation can be rated as marginally unsatisfactory, although both teams made great efforts during implementation to adjust the project and address the problems with the designs. However, the constant changes in team composition did not help to advance the project as needed. About 63 percent of the loan was already disbursed at the time of restructuring and the early progress and performance of the project was mostly problematic. The Restructuring brought necessary improvements and subsequent implementation and disbursement improved. The much narrower focus of the project, however, also meant that, despite better progress, no significant PDO or IOI indicators were met by closing, although some might reach their target in the coming months.

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

37. The monitoring and evaluation of the project was hamstrung by a Results Framework that lacked indicators with strong causal links between project objectives and expected results, inadequate targets, missing or incorrect baselines, and data reporting uncertainties. This continued to be the case following project restructuring, despite dropping and replacing indicators that were focused to the reallocation of funds to the large-scale infrastructure investments. Some of the revised indicators resulting from the restructuring could not be met by project closing. A number of indicators, however, are likely to be met in the coming year as the Government will complete some of the major works. Among others, the reduction in transit time in Juazeiro do Norte is certainly going to be achieved when the Bypass is completed and operational, but this can only be fully measured after June 2017. In addition, the project installed the main

sewage network, but to date only 3,000 out of 12,500 residents in the *Seminário District* have been connected to it. The Crato Government has received federal funding through Caixa and is currently implementing a plan to connect more households, which will require a combination of enforcement and support to the families to pay for the connection, as required by the law. While likely a few months late, the new connections will work towards another project indicator.

38. One specific shortcoming in M&E and for project implementation was that project documents did not include any explanation of the protocols and methodology to be used to measure and aggregate data and ensure that only impacts attributable to the project are measured (as some impacts are quite broad.) Throughout project implementation and the submission of several ISRs, this lack of protocols and methodology was never addressed, making it hard to currently measure and quantify the positive impacts and outcomes of the project. Some targets were never met, and the attribution of the project is not very clear. At restructuring, five of twelve indicators were dropped and three were replaced by Core Sector Indicators, which are mostly output related (e.g., km of urban/rural roads) and do not add much value in terms of measuring overall project results.

39. Overall, M&E is rated unsatisfactory for not having designed a more effective results matrix that could more effectively measure the causal links between project investments and objectives. This was even more accentuated after the restructuring, when the problems with the economic development activities were known and the scope of the project was focused considerably while most of the indicators related to the economic cluster development remained the same.

2.4 Safeguard and Fiduciary Compliance

40. *Safeguards.* The Project was classified as environmental Category A based on the large scale interventions in the *Seminário District* and the Juazeiro do Norte Bypass. Social and environmental safeguards compliance was considered satisfactory throughout project implementation. The Bank team conducted three environmental safeguards training with the UGP staff and regular supervision missions to verify safeguards compliance. Some fairly routine resettlement activities faced significant delays for the *Seminário District* and Juazeiro do Norte Bypass, though were ultimately conducted satisfactorily. At the time of the ICR mission, 43 families from the *Seminário District* remained in temporary housing, awaiting permanent homes in a new housing complex built through the *Minha Casa Minha Vida* program. Annex 4 offers more detail on social and environmental safeguards aspects of the project.

41. *Fiduciary Aspects.* Financial Management (FM) supervision missions were generally rated as Satisfactory/Moderately Satisfactory, with the exception of the July 7, 2015 mission, which was rated as Moderately Unsatisfactory (due to an overdue audit and lack of a FMS and Project Coordinator at that time). The FM risk rating was considered Moderate throughout the project's life. Initially, delays existed in adjusting the State's Administrative System to generate IFRs, which was overcome after the second year of project implementation. Agreed action plans were generally implemented. PIU staff turnover did however, have an impact on the projects internal controls arrangements, specifically in delays of approval and submission of agreed information. All audit reports expressed unqualified and unmodified audit opinions, and 50 percent of the audit reports were received after the due date (up to 3 months), due to delays in the bidding/hiring processes. All IFRs received during the life of the project were considered acceptable and were received on a timely basis. There were no instances of ineligible expenditures identified during the life of the project.

2.5 Post-completion Operation/Next Phase

42. **Urban infrastructure.** Many of the project financed infrastructure investments have been transferred to local authorities. The small-scale investments in local bypass roads and historic downtown areas have been completed for a number of years and are reasonably well-maintained by the respective municipal governments under their regular maintenance services for roads and parks. Concerns always remain if sufficient resources are allocated on a yearly basis, especially in times of severe fiscal constraints as currently witnessed in Brazil. The Bypass in Juazeiro do Norte will remain a state road, maintained by the State Department of Roads and Highways (DER). The positive impacts of this infrastructure on communities and local development are very clear as shown in some of the pictures.

43. **Geopark do Araripe.** The *Geopark* is managed by a team at URCA, although their main focus is not site management but promoting study tours and attracting researchers and academic groups to the sites; unfortunately URCA is incapable of managing the park itself or the growth of tourism. Currently, the day-to-day management of the nine different sites is the responsibility of different municipal governments or local communities, depending on the arrangements and site ownership. The recent economic crisis has affected the maintenance at some sites, to the point that one was closed to the public, although visits could be arranged. The SCidades has recognized the weakness of the current model and is working on a more detailed management plan for the entire Araripe Region and strengthen the management model for the different sites. Better protection of this unique and critical park is needed, as well as a more sustainable management model that might include some level of payment to support O&M of the park.

44. **Multifunctional Center.** The State of Ceará is responsible for managing the Multifunctional Center, for which a detailed management plan was prepared by the project. A special administration was created by the State, which is responsible for the maintenance and operation of the Center, but also is responsible for attracting and negotiating with new tenants and businesses. Currently a number of state agencies, including the “one-stop” public services office of “*Vapt-Vupt*”, and URCA’s administration already moved into the building, and negotiations with the Municipal Government of Juazeiro do Norte to move there were advancing well. This could enable a PPP-type arrangement to manage the Center in the future, solely financed with revenues from rental income without transfers from the State Government.

45. **Vila da Música.** An agreement was also reached on the management of the *Vila da Música* (Music Village). The State Secretary of Culture (SECULT) has received the necessary budget and will operate and maintain the facilities and assets related to the *Vila da Música*, while the *Sociedade Lírica do Belmonte* (SOLIBEL) will use the facilities and manage the curriculum of the music and social inclusion program for poor children. The arrangements seem adequate to sustain the program and facilities in the long run.

46. **Seminário District in Crato.** The investments in and around the *Seminário District* are being managed and maintained by Crato Municipality, but the local community also has played an informal role in some maintenance activities such as landscaping, irrigation and keeping people from vandalizing equipment. During recent visits, a few issues were identified regarding some broken equipment, and the local government ensured they would address these and intensify patrolling in the area. In addition, the municipal government through the municipal environmental bureau and water company agreed to implement a plan to incentivize and enforce the connections of the remaining 9,000 inhabitants in the neighborhood to the sewage network. Concerns remain on the sustainability of the project financed WWTP. The Municipal Secretary of Water and Sanitation of Crato (*Secretaria de Água e Esgoto de Crato* – SAEC) prepared a detailed O&M Plan, but concerns remain on their capacity and resources available to operate and maintain the system in the long-run.

47. **Economic Cluster Activities.** The investments in the footwear sector were basically dropped from the project, and it is not clear how some of the earlier studies and technical assistance are helping

strengthening the cluster development and increase in productivity in the sector. The tourism sector is growing fast and the region has witnessed a rapid increase in visitors based on data from the Secretary of Tourism and passenger data at the airport and guests at hotels. It is less known how much are visiting *Geopark*, but the increase in hotel room bookings throughout the year indicate that visitors are diversifying away from pilgrimage towards other activities. The total number of tourists and visitors cannot directly be attributed to the project, but there is a solid foundation for further development in the sector.

48. **Cariri Regional Integration.** A number of interesting regional studies were financed by the project, but almost nothing has been implemented so far, with the exception of some punctual investments related to the Tourism Strategy. The State Government is planning to organize a seminar in the coming months to revive the discussion on regional coordination and metropolitan governance with the recently elected mayors. The Bank will participate in the meeting and, together with the state, hopefully present some of the key results and recommendations of the studies and discuss possible follow up.

49. A follow up operation is not under consideration at this time, although the Bank will continue to be engaged with the Second Phase of the Ceará State Program for Results. The Bank and Borrower are signing a Management Letter establishing the measures the Borrower should take to complete all works, especially the Bypass and sanitation connections in *Seminário* District and resettlement activities. The letter will also include measures identified by the SCidades to improve the management of the *Geopark* and further exploring the options of a PPP for the Multifunctional Center discussed earlier. The State should also follow up on the studies and detailed designs of the regional landfill and the tourism plan and discuss ways to implement the recommendations with cities in the region. The Bank will monitor the resettlement activities until satisfactorily completed.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation

50. **Relevance of Objectives (Substantial):** The PDO had high relevance to the Country Partnership Strategies (CPSs) at appraisal and closing. The CPS at closing (FY2012 – 2015) called for the promotion of regional economic development through improved policies, strategic infrastructure investments, and support for private sector actors, with particular emphasis on frontier regions, including the Northeast.⁴ The CPS also highlights the relevance of continued engagement with sub-national governments. The PDO directly supports these priority issues. The Project also addresses the Bank's corporate twin goals to reduce poverty and boost shared prosperity by promoting economic development in a poor region of a poor state. The Project is aligned with Sustainable Development Goals (SDGs) 6, concerning water and sanitation services, and 11, promoting sustainable cities.⁵ Additionally, the Project had substantial relevance for the State Government of Ceará's 2016 to 2019 Multi-Year Investment Plan (*Plano Plurianual* - PPA), which identifies priority sectors, including urban development and infrastructure, with particular emphasis on sanitation, and mentions the continued interest in the development of regional approaches.⁶ The PDO was considered quite ambitious, particularly in light of the more narrow project scope through the restructuring, but remained relevant. Economic development was an important overarching goal, but the PDO could have been narrowed more to specific economic activities it was supporting in the tourism and footwear clusters. Considering the high relevance to Bank strategy and global goals, coupled with substantial relevance to government strategy at closing and overly ambitious

⁴ Brazil Country Partnership Strategy FY2012 – 2015.

⁵ *Sustainable Development Goals*, United Nations, <https://sustainabledevelopment.un.org/sdgs>.

⁶ State of Ceará 2016 – 2019 Multi-Year Plan, <http://sistemas2.seplag.ce.gov.br/download/ppa/VOLUME-1.pdf>.

inclusion of the promotion of economic development, the overall Relevance of Objectives is considered substantial.

51. **Relevance of Design and Implementation (Modest):** The PAD outlines detailed background information and clear linkages between project objectives and activities to be carried out. However, the multi-sector scope of project activities required stronger and more binding inter-agency coordination mechanisms than those established by the project. The results framework, including after the restructuring, did not fully reflect the PDO or capture the tangible impacts of the project on the ground. The Bank team made noteworthy efforts to mobilize expertise to support the government's implementation of project activities, but it fell short in providing consistent and effective support across all components, particularly economic development. However, the Team did make commendable progress through the Midterm Review and during the restructuring to refocus the project on impactful and feasible activities that have since led to meaningful impacts for local residents. Indeed, a satisfaction survey carried out by the PIU in early 2017 found that 98 percent of residents felt that the infrastructure works "brought benefits to the region" and all respondents were partially or completely satisfied with the works. Finally, sustainability and O&M responsibilities for many project activities remain an open question through the design of the project and at the time of ICR writing.

3.2 Achievement of Project Development Objectives (Efficacy)

Rating: **Modest**

52. The Project Development Objectives were to (a) to promote economic development; (b) to improve urban infrastructure; and (c) to enhance regional management capacity, all in the Borrower's Central Cariri Region. The assessment below examines evidence for each of the three sub-objectives of the PDO.

Sub-Objective (a): Promote economic development. Rating: *Negligible*.

53. Indicator 4 under PDO (a) measured the "**percentage increase in number of tourists that visit Cariri Central**" and was a very broadly defined indicator rated **Negligible**. Data from SETUR shows an increase in number of tourists visiting the Cariri Region from 1.1 million in 2009 to 1.8 million tourists in 2015, or almost a 66 percent increase. The number of passengers at the airport of Juazeiro do Norte more than doubled from almost 247,800 in 2009 to 540,500 in 2016. The number of jobs in the service sector linked to tourism – hotels, restaurants, tourism agencies, recreation and entertainment – also doubled between 2009 and 2015, showing that the project had indeed selected an important sector with potential for growth. However, it is impossible to attribute this growth to the limited investments of the project in tourism. The interventions in *Geopark*, the Sustainable Tourism Plan and the dialogue with relevant stakeholders contributed to an uncertain degree to this growth. Given that the Project activities cannot reasonably be thought to drive the increase in tourism, the impact on visitation is considered negligible.

54. There were no other specific project indicators in the results framework to assess the promotion of economic development, since the footwear cluster was dropped. As such, the causal links between the impacts of project investments on tourism growth and economic development are difficult to measure, the efficacy is rated as negligible.

Sub-Objective (b): Improve urban infrastructure. Rating: *Substantial*.

55. Indicator 1 under PDO (b) was '**Percentage reduction of average morning peak hour travel time between defined action points in central Juazeiro do Norte**' rated **Modest**. The indicator was intended to measure the impact of the construction of the Juazeiro do Norte Bypass financed by the Project to divert traffic from the center of the city and thus reduce travel time. Nevertheless, the Bypass

was only partially completed during Project implementation and has not been opened to traffic yet. To attribute any decrease in travel time to the Project, the indicator would only be measurable once the Bypass is complete. Although the road has not been opened yet, sections of it are already area already been used and the last section is substantially completed with some remaining works on one of the viaducts and traffic signaling and calming measures. So, although the road impact at this stage is not easy to quantify, the impact on traffic in central Juazeiro do Norte is expected to be substantial by the end of this year. At this stage with the some of the sections open for traffic, the rating is modest.

56. Indicators 2 and 3 under PDO (b) were ‘**People provided with access to “improved sanitation facilities” under the project (Core)**’ and ‘**People provided with access to “improved sanitation facilities – urban”**’ rated **Modest**. This indicator envisioned the completion of sewerage connections for 12,500 residents of the *Seminário District* neighborhood in Crato as part of the broader urban upgrading works in the area. Some 3,000 sewerage connections were completed by the Project. Nevertheless, the 16 km main sewerage network was completed under the Project, which will enable the municipal government of Crato to complete the domestic connections within an estimated six to 12 months. A wastewater treatment plan was constructed using counterpart funds to treat the effluent from the *Seminário District*. Given that the important progress was made under the Project to enable access to improved sanitation facilities in the near term, the indicator is rated modest, but is expected to be substantial at the end of the year as the Crato Government is implementing its plan to connect all families in the neighborhood.

57. Indicator 4 under PDO (b) was ‘**Roads constructed, non-rural (Core)**’ rated **Substantial**. This core indicators was added as part of the restructuring with a target of 21.0 km of new roads constructed in non-rural areas. This target was basically achieved as about 16.7 km of roads have been constructed in Barbalha (2.4km), Crato - Bela Vista (5.4 km), Missão Velha (4.3 km), *Seminário District* in Crato (1.2 km) and the first section (3.4 km) of the Bypass of Juazeiro do Norte. The remaining two sections (5.2 km) of the Bypass have been substantially completed, with ongoing works focused on completing the viaducts, access roads and traffic signaling. This indicator was achieved with delays and thus rated substantial.

58. Indicator 5 under PDO (B) was ‘**Roads rehabilitated, non-rural (Core)**’ rated **High**. This core indicator was added during restructuring and envisioned the rehabilitation of 6.0 km and about 7.7 km of roads have been rehabilitated, mostly linked to the rehabilitation of downtown and historic areas in Farias Brito (1km), Crato (1 km), Barbalha (3.7 km) and Jardim (2 km). This indicator was fully achieved and rated high.

59. It is worth noting that, while the financing for the regional sanitary landfill under Sub-objective (b) was dropped from the project by the restructuring, important progress on solid waste management was achieved under the project. The project laid the groundwork for future interventions by (i) supporting site selection for the landfill; (ii) advancing technical designs; and (iii) developing a governance model applicable beyond Cariri (see section 2.2 above). Other Bank-financed solid waste interventions in Brazil—including a project in Brasilia—and globally have reached a similar pre-construction stage during project implementation only to see the government implement the designs financed by the project at later date. Thus, the benefits of the project’s work on solid waste may still be realized in the future.

Sub-Objective (c): Enhance regional management capacity. Rating: Modest.

60. Indicator 1 under PDO (c) was ‘**Percentage increase in number of tourists that visit Cariri Central**’ rated **Modest**. The Project supported several tourism-related investments and activities, including local infrastructure works geared toward tourists and strategic studies. Data were not available on visitors to tourist infrastructure financed by the Project, including the geological sites that form part of

the *Geopark* or the religious sites along the Roteiro da Fé. Studies and tourism-related planning instruments were prepared under the Project, though activities envisioned by the plans have yet to be implemented. It is worth pointing out that there has been significant growth in tourism related sectors in the Cariri Region: employment in tourism-related sectors grew 108 percent in Cariri over the period of 2009 to 2015, while it grew only 44 percent in Ceará on the whole.⁷ Private guide services now partner with local hotels to arrange tours of the *Geopark*, including visits to sites financed by the project.

61. The indicator target sought to capture a 20 percent increase in tourists to the Cariri region from the baseline of 1.17 million in 2010. Indeed, the Cariri region received some 1.84 million tourists in 2015, or a 56.7 percent increase, based on data provided by the State Secretariat of Tourism (SETUR) and reported in the last ISR. The unit of measure from SETUR refers to ‘arrivals’ in the Cariri region at the (i) the Juazeiro do Norte Airport; and (ii) passengers aboard formal regional and interstate bus lines. The data do not disaggregate ‘tourists’ from other ‘arrivals’ (i.e., business travelers or family visits). Thus, the measure of ‘arrivals’ does not offer sufficient detail to attribute any changes in the indicator value to the Project. Nevertheless, while not adequately quantified, the tourist infrastructure financed by the project does attract visitors and the studies carried out by the project have provided the government with further steps to take in improving tourist facilities in the region. Thus, indicator 1 is rated Modest.

62. Indicator 2 under PDO 3 was ‘**Operationalization of a Regional management model for the Central Cariri**’ rated **Modest**. This indicator was comprised of three aspects: (i) Consultative Committee established and roles defined; (ii) regular meetings of the Consultative Committee (every four months); (iii) Metropolitan Master Plan developed and ratified by the Committee.

63. The Consultative Committee was formally established in 2014 with roles defined for members. The Committee, including local mayors and the State Secretary of Cities, met on several occasions to discuss issues largely related to the proposed regional landfill. However, meetings were irregular and none took place during the final 18 months of implementation of the Project. Mayors inaugurated since then, including those of the regional pole cities of Juazeiro do Norte and Crato, have thus not participated in Committee meetings. At the time of the ICR mission, it was not clear that the Committee would be reestablished in the near term. The State was clearly reengaging on this agenda with the three new municipal administrations. The Bank also participated in a workshop in May 2017 to discuss metropolitan governance models, with special focus on solid waste management and urban mobility.

64. Project design envisioned the preparation of a Metropolitan Master Plan for the Cariri Region. In January 2015, the Federal government promulgated a new Metropolitan Statute that called for the preparation of regional master plans for formally recognized metropolitan areas (of which the Cariri Region is one).⁸ In response to this change in the legal framework, the borrower and Bank teams agreed to proceed with the preparation of an Integrated Urban Development Plan for the Cariri Metropolitan Region. Working with close Bank team support, the borrower prepared a request for proposals (RFP), with detailed terms of reference, for the Plan in September 2015. With limited time before Project closing and cost overruns in infrastructure activities, the Bank and borrower agreed to focus scarce resources and UGP bandwidth on successfully completing the priority infrastructure investments by not proceeding with the bidding for the Plan. At the time of the ICR, bidding has not begun for the Plan, but the RFP remains at the borrower’s disposal for such time that it chooses to proceed with the procurement process.

65. Considering the advances, but lack of consolidation, of the various aspects of the indicator, it is rated modest as the project finished all the preparatory work in terms of management model, engineering

⁷ *Cariri – Cenários e Tendências do Turismo*, Secretaria do Turismo do Estado do Ceará, 2016.

⁸ Estatuto da Metr pole, Law 13.089/2015.

designs and landfill siting. Unfortunately, a regional agreement could not be reached, but the project financed studies and designed have been shared again with the SCidades and the municipalities, which intend to reengage on this important issue that still needs an urgent solution.

66. **Overall Assessment of Achievement of Project Development Objectives.** Despite the shortcomings outlined above, the Project did deliver important results for local residents which should only improve by late 2017 when the Government is expected to complete pending works. It is also worth mentioning that (i) major activities linked to PDO indicators, including the Juazeiro do Norte Bypass and sanitation connections in the *Seminário District*, were not completed yet, but are expected to be completed by the end of 2017; (ii) given the shortcomings of the results framework, many benefits—including, inter alia, quality of life in the *Seminário District* (see photos in Annex 10), the Cariri Multifunctional Center in Juazeiro do Norte, and public spaces in Barbalha and Crato—have not been fully captured by the PDO and intermediate indicators; and (iii) the restructuring reallocated funds to infrastructure investments supporting PDO (b), which ultimately accounted for approximately 76 percent of Project expenditures and performed relatively well.

3.3 Efficiency

Rating: **Modest**

67. An economic analysis was carried out to evaluate the works implemented under the Project, using actual costs and actual benefits obtained from the interventions. The cost of evaluated works corresponds to 72 percent of total cost of interventions. Annex 3 provides details on the methodology and results of evaluation compared to those expected at appraisal. Cost and benefits were transformed to 2009 prices to make them comparable with those used at appraisal. Costs were adjusted to remove currency fluctuation, which was important during the period.

68. Results show that all interventions were worthwhile and impacted positively the economic development of the Cariri Region. Returns from all interventions, but the Multi-Functional Center, are in a range from 15 percent to 21 percent, which are higher than the 12 percent discount rate used at appraisal and similar to what was expected at appraisal. Results err on the conservative side and do not account for all attained benefits.

Table 2. Expected and Actual Internal Rates of Return (IRR)

At Appraisal		Actual	
	IRR		IRR
<i>Seminário District</i>	14.0%	Juazeiro do Norte Bypass	15%
Sugar mill museum	16.9%	<i>Seminário District</i>	21%
Convention Center	15.8%	<i>Vila da Musica</i>	16%
Central Park upgrades	19.1%	Multi-Functional Center	6%
		Urban Improvements	16%
		Total	15%

69. The evaluation of the Multi-Functional Center was conducted estimating the benefits using the preliminary fees calculated by the SCidades, as the minimum required to obtain 6 percent return. It is recommended to revisit these fees and apply an increase before the Center is occupied. The increase will allow higher return and obtain margin for uncertainties. If 30 percent increase were applied, returns would be 13 percent and net benefit US\$ 317 thousand.

70. The intervention in *Seminário District* shows 21 percent return despite that sanitation yielded negative results as only a quarter of the foreseen households have been connected to the sewage network to date. There are financial and environmental risks associated with the sustainability of the operation of the wastewater treatment plant as the water utility SAEC will not have enough resources to pay for the associated costs.

71. Overall. The efficiency of the Project is rated modest given that (i) the original scope of the Project proved overly ambitious and resulted in the dropping of key regional infrastructure investments, including the regional landfill, and virtually all activities related to cluster-based economic development and institutional strengthening, Components 2 and 3; (ii) there were significant delays during throughout implementation and the team faced great delays with completing quite some straight forward resettlement activities; (iii) there is a shortage of qualitative evidence to rigorously evaluate the impact of the investments; (iv) a lack of binding and funded maintenance plans, as outlined in section 2.5, to ensure the medium and long term sustainability of the investments; and (v) shortfall of sanitation interventions and risk of its financial sustainability

3.4 Justification of Overall Outcome Rating

Rating: Moderately Unsatisfactory

72. The overall outcome rating of Moderately Unsatisfactory since there were significant shortcomings in the achievement of its objectives, based on the following factors:

- a. **Relevance: Modest.** The PDO remains tied closely to Bank strategy and relevant to government priorities. Nevertheless, the PDO was quite ambitious by including economic development, which was difficult to achieve, especially given the many external factors that affect this outcome and the narrow focus on a few activities related to specific economic activities, although the infrastructure was improved and will indirectly support the development of the local economy. The PDO was not matched by a well-designed Results Framework, which could measure achievements and substantiate the causal link.
- b. **Efficacy: Modest.** The rating takes stock of what the Project set out to achieve and contrasts this with what was actually accomplished. Only one PDO indicator was fully achieved during implementation and the scope of the results are markedly smaller than those envisioned by the Project. The rating, however, does reflect specific instances of noteworthy progress, particularly with regard to local infrastructure. Also important is the lack of hard evidence and data on impact, although indirect, anecdotal and direct visual evidence is noticeable.
- c. **Efficiency: Modest.** The economic analysis carried out for this ICR (Annex 3) is the basis for the efficiency ratings, which also take into account the project extension, delays in implementation of critical infrastructure investments and the challenges with the sustainability of investments into consideration.

3.5 Overarching Themes, Other Outcomes and Impacts

(if any, where not previously covered or to amplify discussion above)

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

73. The project had considerable benefits for the poor, especially those living around the areas that benefitted from direct project investments. The most remarkable impacts related to the infrastructure improvements in and around the *Seminário District* that greatly reduced the vulnerability of the community to natural disasters but also improved the basic infrastructure and urban environment in the

area. Data from local health clinics shows a considerable decline in number of vector diseases. For example, there were 241 reported cases of Dengue during the peak of the crisis in 2012 to basically no reported occurrences in the last couple of years. A satisfaction survey completed in early 2017 indicated that some 98 percent of residents felt that the works “brought benefits to the region” and all respondents were partially or completely satisfied with the works.

74. Improvements to roads in the neighborhood facilitated the expansion of bus lines that provide new services to the area and thus improve mobility for local residents. Other small scale infrastructure improvements and rehabilitation in several small towns and cities also improved the quality of life of citizens, where many poor live and high levels of satisfaction of local populations. For instance, 92 percent of respondents were completely satisfied with the road linking Crato and Bela Vista and 93 percent of respondents in Farias Brito indicated that the works improved their mobility. The improved facilities of the *Vila da Música* are also directly benefiting poor children and the community through music and other supporting social services. In all of these, there are considerable number of women and children that benefitted from project investments, especially as a result of lower disease incidence.

75. A major concern is the future land speculation around areas that directly benefitted from project interventions and which might impact the poor currently living there. Together with the State of Ceará, the Bank is requesting the State and Municipalities prepare a Master Plan and support to the local population, especially the lower-income people, so their land rights are safeguarded and support is provided during potential negotiations.

76. Unfortunately, an important component of the project to support cluster-development and productivity improvements for micro-enterprises did not succeed. A number of activities were specifically aimed at integrating lower income entrepreneurs into the value-chain and increasing the number of jobs in the tourism and footwear sectors. Most of these activities were dropped, although the tourism sector is developing fast and the footwear sector also continues to grow, but no formal numbers are available on the number of jobs generated, especially for the poor and how the government is supporting micro- and small enterprises.

(b) Institutional Change/Strengthening

77. The impacts of the cluster-based local economic development component and the institutional strengthening components did not have the impacts expected. Despite many coordination meetings and some specific studies and plans, it proved difficult to engage with the micro and small-enterprises through the local association of footwear industries. The project ended having limited impacts in this sector, although some of the results might have been used by SEBRAE and other agencies working on innovation in the sector. Regarding the tourism sector, the project helped improved facilities in the *Geopark*, but the management framework for the park needs to be much strengthened and options to raise revenues from visitors has to be explored. The State is working with URCA to strengthen this structure and work more effectively with the municipalities. In addition, the Sustainable Tourism Plan has identified a number of priority actions that are being implemented by state agencies and municipalities, however the economic downturn has definitively affected the ability of the municipalities to follow up. Current discussions center around ways to assure necessary revenues are provided to manage the *Geopark*.

78. The project also financed a number of studies to analyze and develop the most appropriate arrangements to manage the project financed assets. Unfortunately, the current economic downturn and fiscal situation has also affected revenues in municipalities in the region and, as a result, their capacity to implement and manage some of the project assets. So far they have done a reasonable job in maintaining project financed infrastructure.

79. On the Regional Coordination mechanisms, the project established a regional Consultative Committee, but without much success. A number of meetings were held, but important decisions regarding regional coordination and the landfill in particular, were never reached. Over time the Committee lost political support and the frequency of meetings gradually reduced to the point that hardly any meeting was held in recent years. With the new mayors and municipal governments in place, there seems to be an opportunity to revive the discussions and seek better coordination around a number of regional issues like sanitation, waste management and urban mobility. This time, the State should take a more proactive and prominent role in creating a consortium of municipalities and condition cash transfers to the creation of regional solutions.

(c) Other Unintended Outcomes and Impacts (positive or negative)

80. An important impact of the project has been the increase in land values around Bypass and the Seminary Neighborhood. Although not entirely unintended, they need close follow up by the State and Municipal Governments to ensure that the beneficiaries of the project will not be pushed out by businesses and gentrification. The project team advised the government to ensure all people in Seminary Neighborhood and along the Bypass have a cadaster and are provided with legal advice regarding their rights and during negotiations with speculators. In addition, environmental sensitive areas near the Bypass need to be properly protected as part of the Master Plan.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops

81. As part of the project evaluation, the SCidades conducted a survey among residents, business owners and users around nine main infrastructure investments supported by the Project including the: (a) First section of the Juazeiro do Norte Bypass; (b) *Seminário District* Rehabilitation; (c) *Roteiro da Fé* in Juazeiro do Norte; (d) Bypass in Barbalha; (e) Historic Downtown in Barbalha; (f) Paving and Improvements on Access Road between Crato and Bela Vista; (g) Urban rehabilitation in Farias Brito; (h) Rehabilitation of Southern Bypass in Nova Olinda; and, (i) Rehabilitation of Central Plazas in Crato. An overwhelming majority (over 90 percent) of the respondents were satisfied with the improvements financed by the project and the use of the public spaces has increased significantly after project investments. The main concern raised by the respondents is related to the maintenance of these facilities.

4. Assessment of Risk to Development Outcome

Rating: **Significant**

82. The risk to development outcome balances positive and negative factors and is overall rated Significant. As mentioned the Borrower has the resources to complete the key interventions, the main risks being the successful completion of the pending resettlement activities and the overall fiscal situation of the municipalities and their ability to provide sufficient resources operate and maintain the project financed new and rehabilitated infrastructure in urban areas. The expansion of the connections in the Seminary Neighborhood is uncertain, although Crato Municipal Government has committed to implement an action plan to achieve the target of 12,500 people by the end of 2017. A number of issues have already been raised regarding the management of the *Geopark* that need further strengthening to ensure long-term sustainability. URCA does not have the necessary experience and mandate, and the day-to-day management of the geological sites by different municipalities and community associations. In general, there are concerns about the ability of municipalities in the current fiscal situation to be able to devote sufficient resources to the maintenance of some of the project financed facilities.

83. Despite great efforts and a number of meetings organized with the Regional Committee to coordinate policies among municipalities, the Committee never received strong political support and

slowly lost prominence and no more meeting were held in 2016 (a mayor election year). The State of Ceará is again trying reengage with the new municipal governments to address some of the regional problems like sanitation and mobility, but it is uncertain to what extent it will succeed.

84. In November 2013 a Consortium was established for a regional solution of the solid waste problem, however no concrete actions and investments were made despite the considerable efforts by the team to coordinate and prepare detailed studies. Overall, the lack of political support and clear incentives, ultimately resulted in many of these activities being dropped of the project after restructuring. There is still hope that many of the efforts will be picked and the project financed studies regarding the regional landfill have been shared with the new government, but risks remain high that nothing will happen in the foreseeable future.

85. Finally, the outcomes of the investments in the regional economic development, focusing on tourism and the footwear cluster are also very uncertain. A number of studies were prepared, but without strong ownership at the local level, not clear what will be done with these plans. Notwithstanding these risks, the region has been developing fast and the economy has been doing quite well, despite the economic crisis that has been affecting Brazil.

5. Assessment of Bank and Borrower Performance

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry

(i.e., performance through lending phase)

Rating: **Moderately Unsatisfactory**

86. A number of factors have led to a Moderately Unsatisfactory rating. Overall, the insufficient level of preparedness of complex investments combined with difficulties faced in their implementation (including client commitment) hampered the project throughout. In Component 1 (infrastructure), the landfill and some smaller projects mentioned in the PAD were dropped because of a lack of preparedness or challenges with client commitment that could have been better anticipated. For Component 2 and 3, Regional Economic Management and Institutional Strengthening, a lack of municipal commitment and ownership was even identified as a substantial risk during project preparation, but although the PAD presented a thoughtful analysis of mitigation measures, including the Regional Consultative Committee, ultimately these measures were insufficient to overcome coordination challenges compounded by vested political interests. Finally, cluster development and working with large numbers of municipal SMEs (who operated under somewhat irregular circumstances and were wary of closer government scrutiny) proved very difficult, despite the broad range of analytical work that had been carried out. A more insightful risk assessment accompanied by mitigating measures would have helped the project design.

87. Importantly, the original and the restructured Results Matrix was not well designed in terms of measuring the results and causal links (attribution) to loan activities, which greatly complicated a proper assessment of the impacts of the project. In addition, some indicators were not really feasible. For example, Components 2 and 3 called for some important studies related to the *Geopark*, tourism, and a regional master plan, and expected results were reflected in several indicators that called for ratification budgeting (e.g. Indicator 2: Percentage of actions from the Integrated Sustainable Tourism Development Plan specified in the Annual Budget Law of the State or Municipalities) or implementation of recommendations that were not yet known (e.g. Indicator 3: Adoption of a new management model based on the *Geopark* Business Plan). As the documents produced numerous generic recommendations that would have to be turned into projects before achieving the stated objectives, the indicators were not very

useful. To obtain concrete results from such studies, the indicators and loan incentives should have been structured differently.

88. The project preparation also failed to deliver project-ready activities that can be procured and implemented quickly. Even with the long preparation period and a year of delay between Approval and Effectiveness, activities were not implementation ready and consequently start-up and disbursement suffered.

89. Finally, staff changes within the Bank team hampered preparation and supervision. It would have been beneficial to have the same specialized staff to supervise and support the cluster development and competitiveness activities throughout project implementation, as it required sustained support and building of a network; problems encountered in cluster development might in that case have been avoided.

(b) Quality of Supervision

Rating: **Moderately Unsatisfactory**

90. As mentioned in previous sections, numerous supervision problems existed, which generally all followed from having a not very well-prepared loan that underestimated risks and lacked certain mitigating measures, with a results matrix that did not properly identify causal relationships. These various issues then led to a very slow start-up and low disbursements as a result of poor designs and resettlement issues. The lack of strong quality control and early diagnosis of problems, lead to many delays and frequent corrections. As discussed, a number of infrastructure projects were dropped or delayed, and the lack of strong client ownership lead to poor results in Components 2 and 3. Ultimately this project had to be extended in 2014 and restructured in 2015, which basically reallocated funding to finish the largest subprojects: the Juazeiro do Norte Bypass and the *Seminario District* rehabilitation works; and significantly narrowed investments under Components 2 and 3.

91. While supervision missions were conducted generally twice a year and task managers maintained contact with counterparts, the high rate of change in bank staff and task managers (seven Bank TTLs were involved with the project over the course of the loan identification, preparation, and supervision) affected implementation and project support and supervision. Moreover, project ISRs did not clearly identify implementation challenges, presenting a relatively optimistic outlook and lacking proposals for mitigating interventions until the actual restructuring. The restructuring, which basically turned the Loan into a regional infrastructure effort to finish up ongoing subprojects, did not measurably improve results; even with extension and restructuring, the Seminary sewerage and resettlement were not completed at project end, and the Juazeiro do Norte Bypass will be completed in June 2017, but still faces some land compensation issues. End-of-project supervision, however, has been ramped up by the Bank team, and a Management Letter is being prepared to ensure all works, resettlement activities, management plans, and sustainability of investments are completed or strengthened.

92. The Pre- and post-restructuring supervision ratings are respectively Moderately Unsatisfactory and Moderately Satisfactory, but as disbursement before restructuring is greater, on balance supervision is rated Moderately Unsatisfactory.

(c) Justification of Rating for Overall Bank Performance

93. Loan Preparation and Supervision are both Moderately Unsatisfactory, as explained above, resulting in an Overall Bank Performance rating of MU. Most crucially, Components 2 and 3, which in the PAD together involved 57 percent of the total loan and 50 percent of project expenditure, produced few results, with both components severely narrowed after the restructuring; in the end, only about 16

percent of loan finance went to the two components. A change in PDO at restructuring would not have changed implementation results, but would most likely have helped performance.

94. Despite the MU rating, the project accomplished key works that directly address municipality infrastructure needs that will have positive impacts on regional development in the long-run. This includes the nearly completed Seminary favela upgrade, which directly improve the quality of life of its 12,500 inhabitants. In addition, the Juazeiro do Norte Bypass is expected to successfully help decongest the city center and add to economic growth. The work on the technical and governance aspects of the regional landfill also established the groundwork for future investment in solid waste management. A number of smaller municipal projects comprising such things as bypass roads, a plaza and park upgrades, and *Geopark* infrastructure were also successfully completed.

5.2 Borrower Performance

(a) Government Performance

Rating: **Moderately Unsatisfactory.**

95. The project was very much aligned with the major strategy of the Government to develop new urban centers within the State and away from Fortaleza. The Government provided strong support during project preparation and program implementation. The State Government, however, was not able to effectively engage with the municipalities and local stakeholders on the cluster-based economic and regional development activities. Although the SCidades, the implementing agency, was quite effective in supervising urban infrastructure investments, it did not have the authority nor adequate capacity to intervene in many of the project areas, such tourism, footwear, or overall economic development, while other critical state secretaries and agencies were not sufficiently engaged in project implementation. Although the political economy situation was not favorable, the State Government could have played a more proactive role, with senior staff and decision makers, to lead the dialogue among different state agencies and between municipalities in the creation of the municipal consortium for solid waste management. During the later stages of implementation, the Government got more involved and was able to expedite implementation by supervising civil works more closely and helping finance some of the resettlement activities itself. More recently, the SCidades is reengaging with the Municipal Governments on metropolitan governance with special attention to solid waste management. The Secretary himself is leading the dialogue and the newly elected mayors and local governments now seem much more involved in finding regional solutions to some of their most pressing problems like transport and solid waste management. While these recent developments are very positive, the performance of the government during project implementation is rated as Moderately Unsatisfactory.

(b) Implementing Agency or Agencies Performance

Rating: **Moderately Satisfactory.**

96. The SCidades as Implementing Agency showed strong commitment to the project and was strongly engaged in the preparation and supervision of activities. Unfortunately, the UGP within the SCidades also suffered from a number of changes in staffing, including seven changes in project coordinators. These frequent changes hampered the engagement with municipalities and the continuity of dialogue with the different local actors. Although the UGP was fully staffed during the later stages of project implementation, it took a while for it to have the expertise needed to manage the project adequately. It lacked the expertise and leadership to navigate the complex institutional setup and vested interests in the different clusters supported by the project. Nevertheless, SCidades and its UGP always showed strong support and implemented the project with adequate diligence, with only the exception of some of the resettlement issues that were delayed. In hindsight, the UGP should have included experts capable of managing the difficult relationships and commitments of different stakeholders and foreseen

the quality problems that plagued all three components. The Secretariat is also partly responsible with the Bank for the lack of a well-prepared project at appraisal that, even after effectiveness, disbursed very slowly.

97. Regarding implementation performance, the UG, once fully staffed, performed satisfactorily in terms of Project Management, Procurement and Financial Management. The SCidades and UGP, however, do share some responsibility for the various problems that were part of the project, including the (i) lack of municipal commitment and the weak performance of the Regional Municipal Committee, (ii) the challenges with the private sector cluster development, (iii) delays in the preparation of TORs and hiring of consultants for the Master Plan and *Geoparks* and tourism studies, and (iv) management problems impacting the *Seminário* District and Juazeiro do Norte Bypass projects, as well as those of smaller investments that were dropped. Hence, despite the good performance of the Implementing Agency after the restructuring, the overall performance is rated as Moderately Satisfactory.

(c) Justification of Rating for Overall Borrower Performance

Rating: **Moderately Unsatisfactory**

6. Lessons Learned

98. **Cluster development is intrinsically difficult, especially in regions or sectors where it has not been done before.** In the case of the Cariri footwear cluster, several other issues emerged that limited the ability of Project activities to drive change. First, it grew increasingly apparent during the course of implementation that some of the small and medium size firms in the region were not formally incorporated and were wary of any efforts that might lead to increased taxation or regulation. In this instance, incentives to remain small and informal might outweigh potential benefits. The industry was also dominated by two to three large players who did not warrant Bank or Government assistance and had little interest in supporting development activities for smaller firms. Additionally, evolving trends in the footwear industry at the national level saw a migration of high value added shoe production to other parts of the country, while the relatively low value added segment (primarily plastic or rubber sandals) remained in Ceará. It became apparent that the firms in the market already had sufficient capacity to produce in this low-end segment and largely did not need outside assistance. Hence careful scrutiny of hub-industry structure is always advisable. Finally, effective hub interlocutors are not always effective representatives of small and micro enterprises and may not be speaking to Government representatives at the right level to get things done.

99. **Ensuring that a critical number of detailed designs and resettlement action plans are ready by appraisal should be standard practice and greatly reduces risks of delays and cost overruns during implementation.** As the project lacked detailed engineering designs and resettlement action plans with clear cost estimates, a lot of efforts during supervision were devoted to preparing technical designs and addressing safeguards issue. Many changes in overall project scope and the frequent changes in designs, hampered project implementation. In addition, the prohibitive costs of resettlement for municipalities required the team to seek alternatives during project supervision that minimized resettlement. This constant focus on addressing the infrastructure problems, clearly reduced the available time of the team to focus on building institutional alliances, supporting regional coordination mechanisms and fostering cluster-based development. Project preparation should focus more on having at designs for at least the first 24-months of implementation and very detailed resettlement action plans and cost estimates.

100. **Build incentive based coordination mechanisms into project design.** Project preparation carefully analyzed the multiplicity of state agencies and other actors involved in the proposed activities,

and formulated a plausible mechanism for coordination through the Regional Consultative Committee. Nevertheless, many of the coordination mechanisms never got off the ground or broke down over the course of implementation. The experience in Cariri highlights the need for future regional or multi-sector projects to design coordination mechanism based on binding incentives that ensure that relevant actors have a true stake in the successful completion of project activities.

101. **Investment loans in the urban sector should focus on specific development challenges and address them through a multiple sector approach, rather than address multiple sectors.** The government sought to drive economic development in Cariri by investing in multiple sectors—from metropolitan governance to road rehabilitation to a music school—all under the umbrella of a single loan. In hindsight, many of the investments did not have a clear link between one another and did little to mutually reinforce other Project activities. Nevertheless, the Government had expressed a strong interest in addressing these disparate sectors. Future projects should balance government interest in working across many sectors with the inherent coordination difficulties of doing so. The Project might have been more successful by concentrating efforts on a particular development challenge, and addressing it from a multi-sector approach. By diving deep within a development challenge, rather than wide across disparate issues, a project could generate linkages that promote successful implementation.

102. **Municipal level investments identified by local authorities have a much higher likelihood to succeed than regional level investment without clear ownership.** The project had difficulties building necessary support to the regional landfill, a key regional activity, due in great part to delays stemming from lack of ownership by the municipalities and eventually dropped due to the increase in costs. Conversely, municipalities showed strong ownership for local, smaller scale initiatives – from the *Seminário* District urban upgrading to the plazas in historic Barbalha – and provided support to ensure completion of these investments. This experience reiterates the importance of ownership and buy-in that comes from municipal activities, and underscores the complexities of working at the regional or metropolitan level.

103. **Financing regional infrastructure can bring different actors together, but without strong leadership and the right incentives, does not necessarily lead to institutional change.** In Cariri, the discussions around the construction of a long awaited regional landfill were intended to catalyze a metropolitan management approach that would eventually extend to other sectors and governance issues. The process of developing the regional landfill succeeded in bringing together mayors and different municipal agencies. However, the process was mostly driven by the Bank team and lost momentum when financing for the landfill was dropped from the Project and the Committee was basically dissolved. Ultimately the promised of important infrastructure was not enough to overcome embedded political economy issues and the lack of very strong leadership from State level decision makers. At the end, the process of defining the locations and management model took too long and the increased costs made the investment unviable for the project. In the future, the State should take a much more proactive role in managing this process.

104. **The Project reinforced the importance of a strong results framework to both incentivize performance as well as tell the story of the Project over the course of implementation.** The Project generated tangible results and improvements in the quality of life for residents in the Cariri Region. However, the project intermediate and outcome indicators do not fully capture the results on the ground and this disconnect is reflected in the ratings in this ICR. More attention to the indicators, baselines, targets, and links to attribute indicators to the Project would facilitate stronger supervision and renewed emphasis on results.

105. **The scope of the 2015 Restructuring of the Project was in essence a Level I restructuring packaged as Level II.** The task team, following GP and CMU guidance, elected to process the agreed

upon changes to the project without changing the PDO, and thus without the need to process a Level I restructuring with Board of Directors approval. The Level II restructuring was delayed several times by Government processing requirements and ultimately processed by the Bank as two separate Level II restructurings due to delays and miscommunications on the Government side. A Level I restructuring would have required additional processing by the Government that could have introduced yet more delays. The decision to pursue a Level II restructuring and not change the PDO expedited the bureaucratic process of streamlining the Project to meet evolving client demands. However, this alternative came at the cost of poor ICR ratings that reflect the misalignment between the original PDO and the revised Project scope. This experience reiterates that, when feasible, task teams, GPs, and CMUs would be better served by taking the time for a full Level I restructuring.

106. The composition and turnover in the Bank and Government teams hurt project implementation. The Project had seven task team leaders on the Bank side, as well as numerous personnel changes on the Government side. The Bank team engaged expert consultants and staff in private sector development, though would have benefited from more consistent and higher level engagement to adequately support the implementation of the cluster development activities. At the same time, it was not clear that the PIU had sufficiently senior staff to be able to convene the various public agencies and private sector actors that needed to be involved across different Project activities.

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

(a) Borrower/implementing agencies

107. According to the SCidades, the Implementing Agency, the ICR accurately portrays the main issues of the Project according to the staff involved in the Project. The SCidades is not proposing any changes in the evaluations made, however, the observations contained in this document will be considered in the execution of future projects. I believe that despite the difficulties, as well as the unsatisfactory result, particularly with regard of the footwear industry and tourism sector, as well as the implementation of the sanitary landfill. The State is currently taking steps to reengage on strengthening Metropolitan Region of Cariri based on an Integrated Urban Development Plan that builds on the infrastructure financed by the Project and provides a solid base for Industrial Development (prioritizing the Footwear Cluster), Tourism (focused around the Geopark), environmental sustainability, and critical issues such as sanitation, solid waste and water security, which were discussed during the preparation and implementation of this project.

108. A number of private groups have shown interest in exploring options regarding waste management and the State will help create an inter-jurisdictional governance structure as part of the recent debates on the Metropolitan Region of Cariri. The project has laid a solid foundation and strengthened the potential for future development of the region. The municipal managers, as well as the regional leaders, have already realized that there is no way out to finance structuring projects without the consolidation of the Metropolitan Region. Everyone is aware that this process will not be easy and a lot of work lays ahead, but our team is very motivated and will do our best to continue the development process that was started with this Project.

Annex 1. Project Costs and Financing

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

Components	Appraisal Estimate		Actual Costs		Percentage of Appraisal
	Loan	Total	Loan	Total	
1. Infrastructure Improvements		33.1	35.9	40.8	123.3
1.1. Regional Infrastructure		14.1	12.3	14.1	100.0
1.2. Municipal Infrastructure		19.0	23.6	26.6	140.0
2. Cluster-Based Local Economic Development		23.7	4.8	9.6	40.5
2.1. Tourism Cluster		8.8	2.4	2.4	27.3
2.2. Footwear Cluster		10.1	0.03	0.03	0.3
2.3. Other Clusters		4.8	2.3	7.1 ^a	147.9
3. Regional Management and Institutional Strengthening		9.1	3.3	7.8	85.7
3.1. Regional Management		1.4	0.3	0.3	21.4
3.2. Municipal Institutional Strengthening		1.4	0.04	0.04	2.9
3.3. Implementation Support		6.3	3.0	7.5	119.0
Total Project Costs		65.9	44.0	58.2	88.3
Front-end fee PPF		0.0		0.0	0.0
Front-end fee IBRD		0.1		0.1	100.0
Total Financing Required		66.0		58.3	88.3

^a Includes disbursements linked to the Cariri Multifunctional Center in Juazeiro do Norte.

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual (USD millions)	Percentage of Appraisal
Borrower		20.0	14.2	71.1
International Bank for Reconstruction and Development		46.0	46.0	100.0

Annex 2. Outputs by Component

Activities by Component and Sub-Component: Original (PAD) and as Modified by Restructuring, and Outputs by Closing

Component, Sub-Component	Fully Completed (11/30/2016)	Partially Completed (11/30/2016)	Dropped	Observations
Component 1: Infrastructure Improvements (US\$33.1 Million, Infrastructure Improvements comprises investments in infrastructure at the regional and municipal levels of Central Cariri to address critical infrastructure deficits, protect and restore the environment, and improve public services for local residents and tourists.)				
Subcomponent 1.1: Regional Infrastructure				
(a) Transportation: Juazeiro do Norte Ring Road		X		Partially Executed. Two of the three planned sections of the Juazeiro do Norte Bypass were completed at the time of the ICR. The third section was underway and expected to be completed by mid-2017. Costs increased from a predicted R\$18 million at the time of appraisal to approximately R\$30 million as the road neared completion.
(b) Cariri Regional Landfill			X	Dropped at Restructuring. Site selection for the regional landfill proceeded slowly through the regional consortium. Technical designs were completed, though increasing costs for the landfill and other infrastructure activities led to the decision to drop financing for the landfill. It is worth noting, though, that the Project provided technical assistance that developed legal instruments for a governance model for the landfill including private sector involvement. The Government has indicated that it could adapt the model for use in other areas in the State.
Subcomponent 1.2: Municipal Infrastructure				
(a) <i>Juazeiro do Norte:</i> Investments linked to areas and facilities utilized by religious tourists; revitalization of urban center; studies related to the multifunctional center.	X			Executed. The Project financed improvements for a series of plazas in central Juazeiro do Norte frequented by religious tourists (<i>romeiros</i>), known as the Roteiro da Fé, an established an open air market with stalls that local vendors rent to offer goods to pilgrims. The Project also financed the completion and build-out of the Cariri Multifunctional Center in Juazeiro do Norte. The building was originally intended to house technical assistance providers for the footwear cluster (including business services and common use machinery), though when support for the footwear cluster was dropped by the Restructuring, the

Component, Sub-Component	Fully Completed (11/30/2016)	Partially Completed (11/30/2016)	Dropped	Observations
				building was repurposed as a hub for local government services. It now houses a One-Stop-Shop (<i>Vapt Vupt</i>) for government services, including 24 state and municipal agencies spanning job training and placement; drivers licenses and IDs; and administrative offices of the Federal University of Cariri (UFCA). As of early 2017, the Municipality of Juazeiro do Norte was considering moving administrative offices to the building. Operation and maintenance arrangements for the building were not well defined at the time of the ICR, though the State is investigating various management options including hiring a private operator.
(b) <i>Crato</i> : Urban and environmental upgrading of the <i>Seminário</i> District neighborhood; improvements to plazas in the city center.	X			Executed. Designs and construction for the urban and environmental upgrading of the <i>Seminário</i> District area were completed under the Project, albeit with substantial delays and cost increases. The Restructuring dropped under-performing activities to focus financial resources on the successful completion of this investment. The renewed focus on the <i>Seminário</i> District delivered a comprehensive program spanning public spaces and plazas, slope stabilization, improved transportation and mobility, and improved quality of life for local residents. The project financed sanitation main pipelines were completed, but only 3,000 out of 12,000 people have connected to the network. Crato is implementing a plan to complete the connections until the end of the year, as required by local legislation.
(c) <i>Barbalha</i> : Transportation upgrades; improvements to historic city center.	X			Executed: The Project financed a 2.4 km Bypass along the periphery of Barbalha and refurbished 3.7 km of streets in the city center. The Project also financed urban upgrading in the Vila do Caldas neighborhood, which included a cable car that the Bank did not want to finance because of environmental safeguards issues - the Government began construction in 2016 with own resources, the upgrading of plazas in the historic city center, and a series of informational plaques that explain the history of noteworthy buildings. These investments improved traffic flow in and around the city, as well as improved infrastructure related to tourism.
(d) <i>Other Municipalities</i> : Urban park revitalization; upgrading of access/entrance roads.	X			Executed. The Project financed a number of minor infrastructure works that were delivered, including upgrading of plazas in the city center of Farias Brito; a 2km access road in Caririaçu; a 5.4 km road linking

Component, Sub-Component	Fully Completed (11/30/2016)	Partially Completed (11/30/2016)	Dropped	Observations
				Crato and Bela Vista; a 4.3 km access road to the geosite with a waterfall in Missão Velha. During implementation, the Project incorporated financing for the completion of a building for the Vila da Música, a non-profit music school, in Crato, as well as the purchase of musical instruments for the facility.
(e) Improvements at the Tupinambá Sugar Mill.			X	Dropped at Restructuring. After the mill facility was removed from the Project, it was refurbished by a private owner and is functioning as a wedding and event space.
Component 2: Cluster-based Local Economic Development (US\$23.7 Million, Cluster-based Local Economic Development will facilitate and promote the growth of key economic clusters in the region to enhance its competitiveness.)				
Subcomponent 2.1: Tourism Cluster				
(a) Investments and studies to improve tourist facilities and management of the Araripe Geopark.		X		Partially Executed: Tourist infrastructure has been completed at nine <i>geosites</i> throughout the Cariri Regional. The works were done well, though some sites are not accessible by the public. A study was prepared for the management model, though it has not been implemented, and operations and maintenance responsibilities remain undefined.
Subcomponent 2.2: Footwear Cluster				
(a) Support for the footwear cluster, including the establishment of a public-private footwear innovation center.			X	Dropped at Restructuring. The Project supported extensive analytical work and technical assistance for the footwear sector. Ultimately, as detailed above, the State took the decision to discontinue activities related to the cluster and focus resources on other Project activities.
Subcomponent 2.3: Other Clusters				
(a) Identify and provide support to additional clusters with high growth potential.			X	Dropped at Restructuring. Note that disbursements linked to the Cariri Multifunctional Center in Juazeiro do Norte are categorized by the UGP under Component 2 and reported as such in the Project Cost and Financing Table in Annex 1.
Component 3: Regional Management and Institutional Strengthening (US\$9.1 Million, Regional Management and Institutional Strengthening is focused on promoting effective governance at the municipal, regional and state levels through activities in Regional Management, Municipal Institutional Strengthening, and Implementation Support.)				

Component, Sub-Component	Fully Completed (11/30/2016)	Partially Completed (11/30/2016)	Dropped	Observations
Subcomponent 3.1: Regional Management				
(a) Support for the formation of a Consultative Committee to serve as the main channel for improving collaboration in the Cariri Region.		X		Partially Executed. The Consultative Committee was formally established and held a total of 11 meetings, though no meetings have taken place since 2015 and it is not clear that future meetings will take place in the near term.
(b) Preparation and implementation of a regional environmental strategy			X	Dropped at Restructuring.
(c) Establishment of a regional consortium to oversee the construction and operation of the landfill.		X		Partially Executed. The regional consortium was formally established, though there was little ownership for the landfill and members were not able to agree on the terms of the landfill. When financing for the landfill was dropped by the Restructuring, the regional consortium effectively dissolved.
Subcomponent 3.2: Municipal Institutional Strengthening				
(a) Support for technical assistance and capacity building activities to strengthen municipal management for the nine municipalities in the region.	X			Executed. The Project financed training for 487 municipal officials from the nine municipalities in the Cariri Region.
Subcomponent 3.3: Implementation Support				
(a) Implementation-related activities, including, <i>inter alia</i> , contracting of consultants and staffing of the UGP to support project implementation, based in Fortaleza and Cariri.	X			Executed. The Project financed the contracting of consultants and staff to support the UGP, which remained fully staffed by the close of the Project. This subcomponent also financed the contract for a works supervisor firm.

Annex 3. Economic and Financial Analysis

1. The objectives of the project were: a) to promote economic development; b) to improve urban infrastructure; and c) to enhance regional management capacity, all in Borrower's Central Cariari Region. To achieve these objectives, the project was divided into three components: i) Infrastructure improvement; ii) cluster-based local economic development; and c) regional management and institutional strengthening. The first component focused on addressing critical infrastructure deficits, protect and restore the environment, and improve public services for residents and tourists. The second component aimed to facilitate the growth of the tourism and footwear clusters in the Central Cariari Region. The component 3 focused on promoting effective governance at the municipal, regional, and state levels.

2. In June 2015, the Project was restructured, and even though the components remained the same, the scope among components changed: Component 1 was prioritized and more funds were assigned, while component 2 was greatly reduced. In Component 1 more funds were assigned for two core investments, namely Urban and Environment Upgrading in the *Seminário* District in Crato, and the Bypass in Juazeiro do Norte. In component 2, the activities were focused on infrastructure improvement at nine sites of the *Geopark*; the Technology Center was transformed into a Multi-Functional Center that now houses a number of state government organizations, including *Vapt-Vupt*⁹ and the Regional University of Cariari (URCA). The siting and implementation of the landfill faced many difficulties and it was never implemented. The funds assigned to component 1 increased by 37% while component 2 reduced by 27%. Actual costs of works were 19% lower than the planned costs after restructuring.

Table A3.1. Original Allocation and Revised Allocations per Component

US\$ Million	Original Allocation	After Restructuring	Actual Costs	Changes Restr. x Actual
Component 1.	33.1	45.3	40.8	-10%
Component 2	23.7	17.3	9.6	-45%
Component 3	9.2	9.2	7.8	-15%
Total	66.0	71.8	58.2	-19%

3. The project benefited the population at large in the Crajubar Region through improved traffic and infrastructure amenities, parks and streets in downtown areas of municipalities, and urban upgrading of the *Seminário* District in Crato,

Methodology

Methodology Used at Appraisal

4. During appraisal, the economic evaluation was conducted for the following interventions under components 1 and 2: a) area improvement around the Sao Jose Seminary; b) *Tupinamba* Sugar Mill Museum; c) Convention Center; and d) Central area plaza upgrades. These interventions shared 17% of total expected cost of the project.

Table A3.2. Expected Costs of Interventions at Appraisal (BRL Million)

Component 1.	60.68
---------------------	--------------

⁹ *Vapt Vupt* is a "one-stop" service center that integrates 24 state and municipal agencies and offers more than 350 citizen services.

Bypass road (Juazeiro do Norte)	18.17
Landfill	6.00
<i>Seminário</i> District (Crato)	7.70
Museum Tupinamba	1.15
Urban plazas upgrade (Crato)	2.23
Integrated urban enhancement (Juazeiro do Norte)	10.22
Others from various municipalities	9.61
Other mobility and accessibility enhancements	5.60
Component 2.	42.96
Geropark	12.00
Multi-Functional Center	10.00
Convention center (Crato)	9.10
Technical assistance	6.46
To be defined	5.40
Component 3.	12.59
Total Project Costs	116.23

5. Cost benefit approach was used to evaluate the interventions at appraisal and the discount rate used was 12%. Benefits were measured using two techniques: a) properties' appreciation expected from improving the Seminario District, and from the Plaza Integration; and b) consumer surplus measured as entry fee to pay at the improved *Tupinamba* Sugar Mill Museum; and as rental fees to pay at the improved Convention. Results of the evaluation at appraisal showed returns in the range of 14% to 19%.

Table A3.3. Expected Returns at Appraisal

	IRR
<i>Seminário</i> Park	14.0%
Sugar mill museum	16.9%
Convention Center	15.8%
Central Park upgrades	19.1%

Methodology Used at ICR

6. Two of interventions evaluated at appraisal were implemented, that is: improvement around *Seminário* District, and central park upgrades, yet their scope changed from preparation to restructuring, which defined actual implementation.
7. The interventions included in this evaluation are part of Component 1 and Component 2. In Component 1 the following interventions were evaluated: Bypass in Juazeiro do Norte, *Seminário* District, urban improvement (parks and sidewalks) and *Vila do Musica*. In Component 2, the Multi-Functional Center was evaluated: All of these interventions represent 72% of total cost.
8. This evaluation was conducted using the same approach as at appraisal, that is, Cost Benefit Analysis. Under this approach, net benefit generated of each component is calculated on incremental basis as the difference between the incremental benefits and the incremental cost of two scenarios: “with” and “without” the project. The “with” project scenario included actual achievements and costs from implemented works. The “without” project scenario kept the situation unchanged. The activities were appraised measuring their flow of costs and benefits for the lifetime of the project, estimated at 20 years. A discount rate of 12% was used to maintain the same rate used at appraisal.

Table A3.4. Actual Cost of Works (Nominal Prices)

Component 1.	129
Bypass Road (Juazeiro do Norte)	56
<i>Seminário</i> District	34
Roads in various municipalities	21
Urban Improvement	18
<i>Vila da Musica</i>	4
Component 2.	21
<i>Geopark</i>	5
Multifunctional Center	14
Technical Assistance	2
Component 3.	18
Total Project Costs	168

9. The benefits were measured using the same techniques used at appraisal, which are: properties' appreciation, and entry fees or rental fees as proxy of the willingness to Pay.
10. The fiscal analysis conducted at appraisal from 2003 to 2006 showed sound fiscal performance. The sound fiscal performance allowed the State of Ceará to accomplish with most of the fiscal requirements established by the Fiscal Responsibility Law. A fiscal evaluation of the State was not conducted for this ICR as none of the interventions implemented targeted fiscal improvement as it was expected at appraisal.

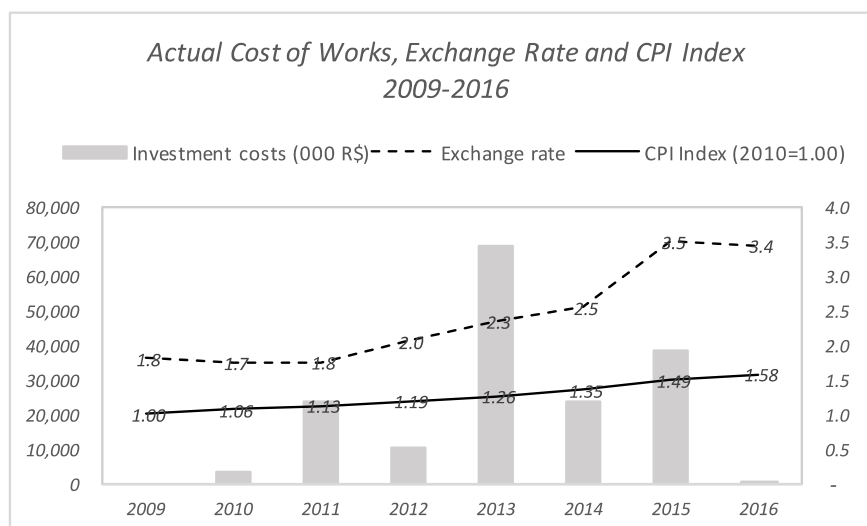
Costs

11. Actual nominal prices were transformed to 2009 prices to make them comparable to the ones foreseen at appraisal. This analysis included the schedule of payments and the respective currency. Disbursements from the loan were transformed to 2009 Reais using the exchange rate at appraisal. Counterpart funds were transformed to 2009 Reais using the cumulative inflation from the time of appraisal to the date when funds were used.

12. During implementation period 2009-2016 the Brazilian real fluctuated widely. From 2009 to 2011 it appreciated by 3% from BRL 1.8 to 1.75 per 1US\$; then a devaluation period started and lasted until 2015, in which the currency devaluated by 99% from 1.75 BRL to 3.49 BRL per 1 US\$. From 2015 to February 2017, the Brazilian peso appreciated by 11%. The average rate applied to disbursements during the period was BRL 2.89 per US\$, which meant 63% depreciation since preparation. On the other hand, the cumulative inflation was 58% during the period, which in average corresponded to 19%.

13. Annual Investment costs, exchange rate, and cumulative inflation are presented in figure 1.

Figure A3.1. Investment Costs, Exchange Rate, and Cumulative inflation 2009-2016



14. Actual cost of interventions was BRL 168 million, about 70% of which was paid from the loan and the remnant was paid from counterpart funds. Annual payments were transformed to 2009 prices. Results show that investment costs at 2009 prices were 31 percent lower than at nominal prices.

Table A3.5. Net Difference between Costs expressed at 2009 prices and Nominal prices.

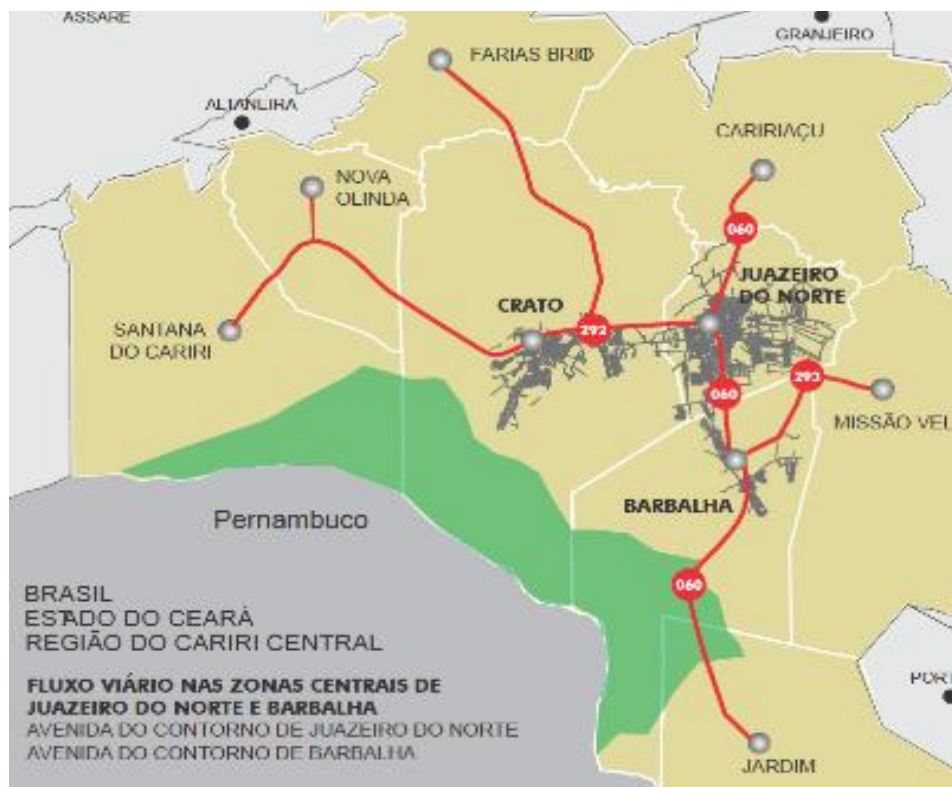
	BRL:US\$	Variation	2009 prices/ nominal prices
Average Exchange Rate	2.86		
Exchange Rate at preparation	1.80	63% depreciation	
Average Inflation		19%	
Net difference			69%

Economic Evaluation of the Bypass at Juazeiro do Norte

15. At time of preparation, the CRAJUBAR region faced critical transport challenges. Traffic congestion was a major problem due to lack of proper transport planning and basic infrastructure. These problems were exacerbated during the pilgrimage events for Padre Cicero, an influential Catholic priest who resided in Juazeiro do Norte during the late 19th century and early 20th century. Major events in honor of Father Cicero attract nearly 1.8 million pilgrims each year to the region, mainly from the Northeastern region.

16. Without the Bypass, regional traffic must go through downtown Juazeiro do Norte as the only way to get to other cities in the region. Traffic from and to Caririacu, Crato, Barbalha, Missao Velha must traverse downtown Juazeiro do Norte as figure 2 shows. Heavy regional traffic congests downtown Juazeiro do Norte on regular basis. The situation is even more complicated during the *Roteiro da Fe*, when pilgrims visit the region.

Figure A3.2. Roads connecting the Cities in the Region



17. Local roads in downtown Juazeiro do Norte were not designed for heavy traffic, and so neither their width is enough for big vehicles, nor the pavement to support them. Residents have trouble walking by due to high volume of traffic and the small space left for sidewalks.

18. The Bypass will be a two-way bypass road that “bypasses” or avoids downtown Juazeiro do Norte. The Bypass will improve regional traffic and connectivity as it will let through traffic flow without interference from local traffic, reduce congestion in the city-center, and improve road safety around the city of Juazeiro do Norte. It will permit higher speed and travel faster to arrive the same destination.

19. At the time of this ICR, the whole road was not completed. The first section of 3.4 km was done, while the remaining two sections of 5.2 km had some ongoing works focused on completing the viaducts, access roads and traffic signaling. All the sections should be fully operational by June 2017.

This evaluation projected costs and benefits for a 20-year period assuming the road was indeed operational at that time.

20. Main direct benefits expected from the Bypass are related to: a) travel time savings; and b) reduction of fuel cost due to higher efficiency of vehicles on the road. There are other indirect benefits, some of which are already perceived by residents, such as properties' appreciation along the area of influence of the road. Others to expect are; a) environmental improvement in downtown Juazeiro do Norte, when the regional traffic is eliminated and only local traffic goes by; b) reduction of traffic accidents when number of vehicles reduces and particularly big buses and trucks that do not need to enter the city; c) lower maintenance cost of local roads; d) improvement of the economy of the city when businesses can show their products in a better way, and customers can appreciate better as well; and e) more safety and mobility provided to residents and to pilgrims who visit the city in their *Roteiro da Fe*.

21. Even though the Bypass will bring countless benefits, there was not enough information to estimate them all. Information was available only for travel time savings, and reduction of fuel cost for those traversing the city. The results are therefore in the conservative side as many other benefits were not included in this evaluation. Additional benefits already achieved, yet not included in this evaluation, are properties' appreciation, which according to people familiar with real estate, properties alongside the road have already increased at least two-fold. In average, the price per square meter in this area was BRL 200 and now it is valued at BRL 450.

22. *Travel Time Savings*. Travel time is one important cost of transportation, and travel time savings are sometimes the primary justification for transportation infrastructure improvement. The Value of Travel Time (VTT) refers to the cost of time spent on transport, including waiting as well as actual travel. It includes costs to consumers of personal time spent on travel (unpaid), and costs to businesses of paid employee time spent in travel. The value of time includes not only the value of paid work but also the unpaid work, which contributes to human welfare. For instance, valuation of children's travel time is important because the time constraint on children affects the trade-off between children's economic contribution to households and school attendance. In general, value of time is related to how people spend the time on a daily or weekly basis.

23. The value of travel time savings (VTTS) refers to the benefits from reduced travel time costs. Travel time is the product of time spent traveling (measured as minutes and hours) multiplied by unit costs (measured as cents per minute or dollars per hour). The minimum wage in Brazil at 2009, BRL 465 per month, was taken as reference to value the time in Cariri region. To account into the value of time for unemployed, informal workers, and children a factor of 50% was used.

24. The travel time needed to traverse downtown Juazeiro do Norte was measured by the Secretaria das Cidades¹⁰ in different points and at different day time. The average time resulting was 20.59 minutes. During the *Roteiro da Fe* period this time increases three-fold to about one hour. The pilgrims come to the city about 4-5 times a year for about 3 days per stay. Local traffic will also benefit from decongesting the city, yet no information was available to include travel time savings for residents.

25. *Savings on fuel costs* results from higher efficiency of the vehicles when traveling at high speed road compared to lower speed inside the city in stop-and-go traffic. CRConsumer Reports¹¹, a US non-profit organization that provides product ratings and reviews, estimates that the efficiency can double driving at highway speeds compared to driving inside cities. However, the efficiency depends

¹⁰ Secretaria das Cidades. Projeto Cidades do Ceará-Cariri Central. Medição do indicador de tempo de deslocamento entre pontos específicos da região central do município de Juazeiro do Norte.

¹¹ CR Consumer Reports. Best MPG for City & Highway Commutes. January 2017.

on how it is driven, the state of the roads, the congestion of the cities, etc. A more conservative assumption of 50% higher efficiency was included in this evaluation.

26. The distance traveled in both situations was estimated as follows: a) Inside downtown Juazeiro do Norte, the distance was measured along the roads that will connect the Bypass Road, that is: one way: divisa Crato-Juazeiro do Norte along Rua San Pedro to Avenue do Agricultor; return: Avenue do Agricultor along Rua Padre Cicero to divisa Juazeiro do Norte-Crato. Distance equals to 7.91 km and 8.09 km respectively, average 8.0 km; and b) Bypass 8.6km. Distance traveled along the Bypass will be higher, yet speed will be higher and so the efficiency of the vehicle. The 2009 fuel price of BRL 0.62 per liter was used for this evaluation.

27. *Average daily traffic (ADT)* that currently goes through specific points entering and leaving the city of Juazeiro do Norte was provided by the Department of Transportation of the State (Departamento Estadual de Transito) per type of vehicle.

28. To count the traffic, three specific points were chosen along the road from/to Caririaco-Juazeiro do Norte, from/to Juazeiro do Norte-Barbalha, and from/to Crato-Juazeiro do Norte. Some of the vehicles may be counted in more than one point as they may have entered downtown Juazeiro do Norte in their way from Caririaco to Crato, or in the way from Caririaco to Barbalha (See figure 2). If so, they are counted in two sites. In order to avoid double counting of the traffic, only one site was included in this evaluation, namely, vehicles that go from Caririaco to Juazeiro do Norte. This makes the results on the conservative side as some vehicles were not included in the calculation.

Table A3.6. Average Daily Traffic (ADT) at specific points

	Total	Motorcycle	Car	Trucks	Buses	Others
CE-060 (Caririaco/Juzeiro)	30,952	8,561	11,960	1,862	369	8,200
CE-060 (Juzeiro/Barbalha)	30,625	6,454	9,583	1,542	301	12,745
CE-292 (Crato/Juzeiro)	15,208	3,704	5,780	558	297	4,869

29. No traffic count was available for local traffic, which will benefit from decongesting the city-center.

Results

30. Investment proved to be worthwhile as it will contribute positively to the economy of the Cariri Region. The investment will yield 15% return and net benefit close to US\$ 5 million, under the assumption that regional traffic remains at current level. If traffic grows at same pace as population, return will increase to 17% and net benefit of US\$ 8 million.

31. Travel time savings contributes with about 80% of the benefits; and fuel cost savings contributes with the remaining 20%.

Table A3.7. Results of Economic Evaluation of Bypass at Juazeiro do Norte

	Present Value of Flows (US\$ 1,000)			IRR
	Costs	Benefits	Net Benefit	%
Bypass (no growth of traffic)	24,616	29,539	4,922	15%
Bypass (traffic grows at same pace as population)	24,616	32,707	8,091	17%

32. The results are reassuring as some other important benefits were not included, such as, travel time savings for residents; properties' appreciation, environmental impact on the city of Juazeiro do Norte, safety on local roads, improving economy in downtown Juazeiro do Norte, and better conditions for pilgrims making the *Roteiro da Fe*.

33. *Financial sustainability.* The Bypass is classified as a state road and consequently maintained by the State Department of Roads and Highways, which reduces the risk of being poorly maintained.

Economic Evaluation of interventions at Barrio *Seminário*

34. Before the intervention, the area of the project faced serious environmental and social risks, with severe soil erosion and environmental degradation. The slope where the interventions were implemented was often used for household trash disposal, causing serious and direct contamination of deep and superficial waters. Moreover, as the soil of the hill eroded and surface vegetation was scarce and could not protect the ground from runoff, sediment flowed into the canal of the Rio Granjeiro. Water passed through the flood-prone canal with great force, causing river sedimentation and drainage system clogging, resulting in environmental degradation and contributing to urban flooding. The area was not safe and avoided by both Crato population and residents of the area.

35. The intervention improved significantly the area. The works included: a) urban upgrading of the slope and surrounding areas; b) containment of areas experiencing soil erosion, through drainage works and reforestation; c) construction of public outdoor facilities, including lighting and pathways to walk, recreation, and exercise; d) construction of other physical upgrades for the area surrounding the Seminary, as well as the public areas near homes not resettled; and d) installation of the main sewage network, which was built with capacity to cover the whole population in the neighborhood, estimated at 12,500 residents, yet only 3,000 are connected (or about 1,000 households).

36. The slope stabilization and improvements in the *Seminário District* have greatly reduced environmental risks and improved the quality of life of the local population. Surveys have shown the great satisfaction of the residents with the improvements, which are evident. The location of the intervention area is very desirable. Given its hilltop setting, the site boasts views of virtually all Crato, the statue of Padre Cicero located in a hilltop in Juazeiro do Norte, and the Chapada do Araripe (National Forest of Araripe).

37. Benefits from the intervention are being perceived not only by residents of the Barrio *Seminário* but also by all population in Crato. Thanks to the interventions, the area is now a popular place for walking, relaxing, recreation, or just for enjoying the view. Locals say this site has the best view in the city.

38. The urban upgrading and recreational facilities had impacted not only residents who have immediate access to quality public spaces; but also, people who live in other neighborhoods. In addition to improving the physical and aesthetic quality of the neighborhood and providing residents with places of recreation, visual assets and places to gather, the upgrade has contributed to improve public safety and connectivity. Benefits have been perceived for those who live in further neighborhoods, who may or may not use the public space. There are indirect benefits as well, such as those related to public health, community building, and youth development. Finally, it is predictable that the restoration of the area will help local economic development as more visitors frequent the site.

39. For this evaluation two economic benefits were identified and quantified: a) properties' appreciation; and b) people' appreciation of the site as recreation facility. The first benefit was applied only to households who reside in the area; the second benefit was applied to population of Crato who visit the area to relax. It is estimated that about 20% of the 130,000 inhabitants of Crato, visit the area on regular basis to walk and relax enjoying the view.

40. *Properties' Appreciation.* Recreation and nice areas' value to neighborhood quality is often measured through properties' appreciation. It is found in the literature a significant link between property values and proximity to recreation facilities. In most of the cases, other things being equal, most people are willing to pay more for a house close to an attractive site with great view. At the same time, less attractive or poorly maintained areas with safety issues may reduce nearby property values.

41. At appraisal, the evaluation was carried out measuring benefits as properties' appreciation. Before the intervention, the area associated with the slope was quite devalued, mainly due to problems of accessibility to the nearby city center, low quality urban infrastructure and materials, soil erosion, and closeness to solid waste disposal. The PAD presented the average value per square meter at the area as BRL 9 compared to BRL 57 per square meter in the city center. It was expected at appraisal that the value per square meter increased over a period of five years to BRL 27.50. According to local real estate agents, actual properties' value in the project area surpassed the expectation, yet no additional detail was available. For this evaluation, the same assumption presented in the PAD was used, to be in the conservative side.

42. The price increase is partially explained by the improvement of the area, and partially is the result of the boom seen in the real estate market during the implementation period. The Brazilian property market showed staggering growth over a seven years' period; 2007-2014 mostly supported by a booming economy that reached its peak in 2014. Demand of real estate properties grew at the same time as the economic sectors flourished, especially the energy sector; the mortgage market developed and the interest rate declined; there were also legal reforms that streamlined the foreclosure process. These factors made properties' prices increase at a pace higher than inflation.

43. To measure the impact of the boom of the real estate market in Cariri region, the Brazil's composite FIPEZAP index for Fortaleza was used¹². This index shows that even though the average price growth in Fortaleza has been slowing down, the price of real estate properties increased by 76% during the implementation period, which is higher than the inflation rate (58%) in that period. The property's appreciation in Barrio Seminário was adjusted to take out the impact of the boom of real estate market.

44. *People appreciation of the improved site.* It is estimated that 20% of the 130,000 inhabitants of Crato visit the site in Barrio Seminário to enjoy and relax at least once a week. Interviews in the field were conducted to have an estimation of how much people would be willing to pay for enjoying the area. Results showed that in average about BRL5 would be paid per person every time. This value was transformed to 2009 prices and used in the calculation.

45. Results show 22% return and US\$ 7 million of net benefit. Sensitivity analysis shows that the project will still be viable, if only half of the benefits estimated from residents of Crato who come to the site to walk and relax is included. This result does not include sanitation

Table A3.8. Results of Economic Evaluation of *Seminário* District (without Sanitation)

	Present Value of Flows (US\$ 1,000)			IRR
	Costs	Benefits	Net Benefit	%
Basic Scenario	14,036	21,017	6,981	22%

46. *Financial sustainability.* The investments in and around the *Seminário District* are being managed and maintained by Crato Municipality, but the local community also has played an informal role in some maintenance activities such as landscaping, irrigation and keeping people from vandalizing equipment. In addition, the municipal government through the municipal environmental bureau and water company agreed to implement a plan to incentivize and enforce the connections of the remaining 9,000 inhabitants in the neighborhood to the sewage network. Concerns remain on the sustainability of the project financed WWTP. The Municipal Secretary of Water and Sanitation of

¹² This index measures the changes in price of real estate properties in twenty cities across Brazil, among them, Fortaleza. The indicator is calculated by FIPE (*Fundação Instituto de Pesquisas Econômicas*) based on real estate offers posted online in webpages like ZAP and others, and using a database of about 500,000 offers per month

Crato (SAEC) prepared a detailed O&M Plan, but concerns remain on their capacity and resources available to operate and maintain the system in the long-run as SAEC does not have enough revenues to pay for the costs of operating the sewerage network and the wastewater treatment plant as it is shown below.

47. *Sanitation.* The intervention consisted of the installation of the main sewerage network to cover 100% of the households, and the wastewater treatment plant to treat the sewage for the entire population of *Seminário* District (12,500 inhabitants). Actual implementation however reached only 1,000 households, or about 22% of what was expected.

48. The water utility in Crato operates under deficit. In 2015, revenues covered 89% of operating costs. By the end of 2016 water tariffs increased by 52% after six years of remaining unchanged. The actual increase in real terms was about 10%, after adjusting by inflation.

Table A3.9. Income Statement SAEC

	2015 (BRL 1,000)
Revenues	7,733
Operating Costs	8,648
Net income	(915)
<i>Cost Operating Level</i>	<i>89%</i>

49. SAEC explained that in *Seminário* District, there are about 4,500 water connections and 350 sewerage connections registered in the billing system. 85% of revenue billed is collected. Average monthly bill from water and sewerage is BRL 16 per connection.

Table A3.10. Water and Sewerage Revenues *Seminário* District

	2015 (BRL 1,000)
Billed Revenues	895
Collected Revenue	762
Revenue collection rate	85%
<i>Monthly bill per connection (BRL/connection/month)</i>	<i>16</i>

50. The 1,000 sewerage households connected under the project are not billed yet. SAEC is in the process of incorporating them to the billing system. The sewerage charge will be 35% of the water tariff; when the wastewater treatment plant is in operation, the tariff will be increased to 80% of the water tariff. This means that monthly charge of sewerage and sewage treated will be BRL 13 per connection. Tariff cannot be applied without previous approval of the city council before applied.

51. *Cost of the wastewater treatment plant.* The WWTP has a capacity of 2,764 m³ per day, enough to cover all inhabitants of *Seminário* District. Total cost per cubic meter treated is estimated at US\$0.15, part of this cost is fixed (about 40%) and the rest is variable per volume of sewage treated. If the plant is operating at full capacity annual cost would be about BRL 514 thousand. However, given that sewage from only 1,000 connections will be treated, and including fixed costs, the expected annual cost will be about BRL 316 per year.

52. *Revenue expected from sewerage customers.* The expected charge from sewerage and wastewater treatment is BRL 13 per connection, which will yield annual revenue of BRL 153 from 1,000 connections. If 85% of revenue collection rate is applied, sewerage revenue will be BRL 130 per year, or just 41% of the operating cost of the plant.

53. When the financial gap is projected during the 20-year period, the present value of the deficit is BRL 1.5 million.

54. Including costs and benefits from sanitation to the evaluation of the interventions in *Seminário* District, results show 21% return and US\$ 6 million in net benefits.

Table A3.11. Results of Economic Evaluation of *Seminário* District (including Sanitation)

	Present Value of Flows (US\$ 1,000)			IRR
	Costs	Benefits	Net Benefit	%
Basic Scenario	15,348	21,492	6,144	21%

55. The intervention in *Seminário* District show 21% returns despite the negative results of the sanitation works, which gives reassurance as the benefits are numberless and has made positive difference in the residents' daily life. However, there are financial and environmental risks associated with the sustainability of the operation of the wastewater treatment plant as the water utility SAEC will not have enough resources to pay for the associated costs.

Economic Evaluation of *Vila da Musica*

56. The *Sociedade Lírica do Belmonte* (SOLIBEL) in Crato, is a non-profit organization, dedicated to teaching music, art and culture. In 1973, the school of music was funded to train children of farmers, and then expanded its scope to urban areas, always benefiting low income kids.

57. Before the project, the building which housed *Vila da Musica* was in dire conditions. Some of the rooms were in risk of getting flooded, or even collapsing. The musical instruments were in poor condition. The project financed the completion of a building for the *Vila da Musica* and funded the musical instruments as well.

58. The facilities of *Villa da Musica* are equipped with four private rooms, six rooms for ten students each, an auditorium, and a coliseum. SOLIBEL is planning to use the facilities for several activities besides music. Activities such: sports, cooking lessons, private parties, community meetings, information system training, crafts, dance, photography, cultural traditions, etc. The capacity of the school is for 180 students, and the auditorium for 200 people. The improved facilities are benefiting poor children and the community through music and other supporting social services.

59. The school is meant for low income children and lessons will be provided for free. The use of the auditorium and the coliseum will be charged at a rate not set yet; however, preliminary discussions suggest a fee of about BRL 10 per person per event at the auditorium; and a rental fee from BRL 500 to 600 per time the Coliseum is in use. The expected frequency of events in the auditorium is three times per week, and in the coliseum twice a week.

60. To measure the economic benefits of the *Vila da Musica*, the preliminary fees to charge for the use of the auditorium and coliseum were used after being transformed to 2009 prices. To measure the economic benefit of the musical lessons, the tuition charged for similar lessons in comparable neighborhoods was used, as a proxy of the willingness to pay, that is: BRL 220 and BRL 265 per shared and private lessons respectively. The economic benefit of all the other activities, such as cooking classes, dance, crafts, etc, was not measured given the lack of information regarding number of students, frequency of the lessons, and appropriate economic value.

61. The flow of costs and revenues were projected during a 20-years period. The lifespan of the musical instruments was assumed ten years and so their cost was included in the projection. Operation and maintenance costs were projected including wages for six additional teachers and 1% of the investment cost for general maintenance.

62. Results show 16 percent net return, and net benefits of US\$ 310 thousand. Actual benefits will be higher as additional benefits were not included such as: a) dancing, cooking, and other lessons; and b) improvement of quality of life of the community.

Table A3. 9. Results of Economic Evaluation of Vila da Musica

	Present Value of Flows (US\$ 1,000)			IRR
	Costs	Benefits	Net Benefit	%
<i>Vila da Musica</i>	2,341	2,651	310	16%

63. *Financial sustainability.* The State Secretary of Culture (SECULT) has received the necessary budget and will operate and maintain the facilities and assets related to the *Vila da Musica*, while the *Sociedade Lírica do Belmonte* (SOLIBEL), will use the facilities and manage the curriculum of the music and social inclusion program for poor children. The arrangements seem adequate to sustain the program and facilities in the long run.

Evaluation of the Multi-Functional Center

64. The Multi-Functional Center financed under the project will house several state government organizations, including *Vapt-Vupt*¹³ and the Regional University of Cariri (URCA). The facility consists of: a) built area of 25,642 square meters, 15,562 of them will be used for Government or Institutions offices, and the rest public use ; b) an additional area of 7,627 square meters for events of different nature: artistic, cultural, religious, concerts, seminars, etc; and c) parking area; and c) parking space.

65. *Costs.* The cost of the works implemented at the Multi-Functional Center was about BRL 14 million, 27 percent of which needs to be replaced in a 10-year period (elevators and some equipment); the remaining 73 percent has a lifetime of 25 years. Additionally, the Center will need recurrent costs of maintenance, cleaning, security, and other services. The SCidades¹⁴ estimates that monthly cost of cleaning, security, management, will be BRL 113 thousand; plus, BRL 55 thousand of maintenance cost of the events theater.

66. *Benefits* were estimated as the rental fees that can be charged for using the Center. The SCidades estimated the following preliminary fees to get 6 percent return: a) maintenance and conservation fee: BRL 8.38/m²; b) rental fees: BRL 5.05/m²; and c) maintenance in the area dedicated to events: BRL45,000 per month.

67. Both costs and benefits were transformed to 2009 prices. Results show 6% return, which even though it is similar to the discount rate recommended by the World Bank in the most recent guidelines, it is lower than the 12% discount rate used at appraisal. The higher the fees the better the returns. If the fees were increased by 30% the return would be 13%.

Table A3. 13. Results of Economic Evaluation of Multi-Functional Center

	Present Value of Flows (US\$ 1,000)			IRR
	Costs	Benefits	Net Benefit	%
Preliminary fees discussed by the State	10,976	8,687	(2,289)	6%
Preliminary fees increased by 30%	10,976	11,293	317	13%

¹³ *Vapt Vupt* is a “one-stop” service center that integrates 24 state and municipal agencies and offers more than 350 citizen services.

¹⁴ Martins Santos, Marcos. Plano de Gestão do Centro Multifuncional do Serviços.

68. *Financial sustainability.* The State of Ceará is responsible for managing the Multifunctional Center, for which a detailed management plan was prepared by the project. A special administration was created by the State, which is responsible for the maintenance and operation of the Center, but also is responsible for attracting and negotiating with new tenants and businesses. Currently a number of state agencies and URCA's administration already moved into the building, and negotiations with the Municipal Government of Juazeiro do Norte to move there were advancing well. This could enable a PPP-type arrangement to manage the Center in the future, solely financed with revenues from rental income without transfers from the State Government.

69. It is recommended however that preliminary fees are revisited and set with an increase to allow higher returns and deal with uncertainties.

Evaluation of the Urban Upgrading of Parks, Sidewalks

70. The rehabilitation of parks, sidewalks and streets in historic areas of cities, towns and communities have directly benefitted the local population and created areas with potential for tourism. There were some small punctual improvements along a religious walking tour- *Roteiro da Fe*-, and some of the parks were widening and improved, which allowed congregating more people especially during religious activities in the *Roteiro da Fe*.

71. Local residents have benefited from the intervention in numberless way: a) the space to recreate themselves is bigger and activities are being developed on regular basis after the interventions. During the weekends residents gather to eat from food stalls, and children play around activities organized along the park and sidewalks. Families spend in average BRL 80 per weekend, This kind of entertainment did not exist before the intervention; b) local economy has grown as commerce has increased its revenue by two-fold, according to local owners; and c) sales stands along the *Roteiro da Fe* have expanded their businesses. Handicraft business, in particular, has bloomed. Income has increased by 80%, according to the handicraft Association.

72. The pilgrims are beneficiaries as well. Sites are being used for religious activities, when churches are packed, allowing pilgrims to enjoy more space and comfort They feel more comfortable with the upgrades as they can walk more freely and better participate in religious festivities, adding joy to the tour.

73. Accurate benefits could not be measured as no information was available of number of beneficiaries, and willingness to pay for the interventions. Instead, a sensitivity analysis was carried out to test the minimum number of beneficiaries and minimum willingness to pay required to make the intervention viable.

74. For the analysis, the magnitude of the benefits needed to make the project viable were tested as follows: a) how many residents paying BRL 80 per week would be needed to make viable the project; and b) how much is required from pilgrims' willingness to pay for improvement.

75. Results show that: a) only 500 families paying BRL 80 per weekend would be needed to make the project viable. This seems feasible as this corresponds to just 3% of the population in the region. Personnel from local offices estimates that 20% of the residents are enjoying the atmosphere along the parks and sidewalks; and b) willingness to pay for each of the 1.8 million pilgrims must be at least BRL 1 per year. This also seems feasible, given that results of a survey made by the *Unidade Romaira do Norte*¹⁵ show that 49.7% of pilgrims will be willing to pay up to R\$ 10 per month for maintenance

¹⁵ Projeto Um Novo Olhar. Romarias a Juazeiro do Norte. Unidade Romeira Colina do Horto. Juazeiro do Norte, Ceará. Pesquisa de Opiniao. Out/Nov 2015.

and improvement of the religious tour. Additional information in the survey shows that 87% of pilgrims earn less than two minimum salaries and spend less than R\$ 100 per day during the *Roteiro da Fe*. They stay between 2 to 5 days.

76. If both benefits are included, the minimum required would be half, that is 250 families enjoying the parks and WTP of BRL 0.5 per pilgrim per year.

Table A3. 14. Results of Economic Evaluation of Urban Upgrading

	Present Value of Flows (US\$ 1,000)			IRR %
	Costs	Benefits	Net Benefit	
If at least 500 families are enjoying the activities along the parks and sidewalks	7,113	8,628	1,515	16%
If pilgrims' willingness to pay for improvement were BRL 1 per year	7,113	7,626	513	13%

77. *Financial sustainability.* Many of the infrastructure investments financed under the project have been transferred to local authorities. The small-scale investments in downtown areas have been completed for a number of years and are reasonable well-maintained by the respective municipal government. Concerns always remain if sufficient resources are allocated on a yearly basis, especially in times of severe fiscal constraints.

Summary of Results

78. The evaluation show that all interventions, but the Multi-Functional Center, yield positive returns in the range of 15% to 22%, higher than the 12% discount rate used at appraisal. The Multi-Functional Center shows 6% return given that the preliminary fees to charge for using the center were set with the target of obtaining this specific return. However, these fees do not leave any margin for uncertainties and put at risk the sustainability of the Center. It is recommended to revisit the fees and define higher rates. As example, if the fees of Multifunctional Center were increased by 30%, net benefits will be US\$ 317 thousand and return of 13%. The interventions in *Seminário* District show positive returns and 21% return; despite, negative returns of the sanitation intervention, as it fell short of connecting enough households to make worthwhile the investment.

79. The sample shows returns of 15% and net benefits of US\$ 10.6 million. Benefits 18% higher than costs.

Table A3.15. Summary of Results of the Economic Evaluation

	Present Value of Flows (US\$ 1,000)			IRR %
	Costs	Benefits	Net Benefit	
Bypass (no growth of traffic)	24,616	29,539	4,922	15%
<i>Seminário</i> District	15,348	21,492	6,144	21%
<i>Vila da Musica</i>	2,341	2,651	310	16%
Multi-Functional Center	10,976	8,687	(2,289)	6%
Urban Improvement (parks, sidewalks)	7,113	8,628	1,515	16%
Total:	60,394	70,996	10,602	15%

Annex 4. Safeguards Compliance and Outcomes

Environmental Safeguards

1. The Ceará Regional Development project focused investments in the Central Cariri region, financing a series of small works and territorial rehabilitation interventions in the south region of the state, focused on the recovery of public plazas and the installation of urban equipment. Only two interventions were of greater size (Category A): the Juazeiro do Norte Bypass and the slope stabilization of the *Seminário* District neighborhood in Crato, an old area degraded by the presence of strong erosive processes (*voçoroca*), with the presence of housing in risk areas. The negative impacts are, for the most part, of small magnitude, local and temporary coverage, being restricted to the inconveniences caused during the execution of the works. The socio-environmental management core of the project responded adequately to the demands for coordinating the actions and for the environmental supervision of the works.

2. It had adequate preparation of the Environmental Safeguards instruments still in the preparation phase, having elaborated a Socio-Environmental Management Plan that already identified the proposed set of interventions, expected impacts and action plans necessary to mitigate or even avoid the negative effects of its actions. A total of seven Safeguards Policies were triggered, two of which in a preventive mode, were: OP 4.36 - Forests and OP 4.10 - Indigenous Peoples. The application of these were not necessary, since the proposed intervention for the FLONA and APA of the Chapada do Araripe and the area of the *Geopark* was greatly reduced. All five (5) others were triggered and instruments were applied satisfactorily during the project implementation phase. They are: OP 4.01 - Environmental Assessment, OP 4.04 - Natural Habitats, OP 11.03 – Physical Cultural Resources; and two others Social Safeguards Policies are: OP 4.12 - Involuntary Resettlement and Information Policy and Public Consultation.

3. The Environmental Construction Manual, prepared during Project preparation, already had aspects related to Occupational Health and Safety, having elaborated a specific plan for Environmental Education of the Workers and Code of Conduct in the execution of works, as well as Health and Safety in the Civil works, attending established by the General Environmental Health and Safety Guidelines (EHSGs). The environmental supervision of the larger works (Category A) were accompanied by specialized teams contracted by the UGP, having worked in partnership the environmental team and UGP of the project. Environmental Check Lists were prepared with various items related to: licensing, flora, fauna, water, effluents, air, climate change, soil, recovery of degraded areas, archaeological and paleontological sites, waste (inert, hazardous, non-toxic and health waste), and construction sites, as well as specific questions about workers, communities, code of conduct and environmental education; satisfying World Bank guidelines.

4. It should be noted that throughout the project implementation phase, at least 3 (three) specific environmental safeguards training sessions were conducted, focused on the demands of the team since the initial phase of implementation: 1st training in February 2010, 2nd training in May 2012 in preparation for the balance of planned and implemented actions, and 3rd training in September 2012, during the project restructuring phase.

5. It was also important to note that, in order to make the implantation of the Cariri Regional Sanitary Landfill viable, there was a large investment of time, resources and human capital in the evaluation of proposals, projects, seminars, individual consultancies and other actions that sought to define a quality, technically and economically viability design, together with a management model suitable for regional landfills. Unfortunately, this was an activity excluded from the project at the time of the restructuring due to the lack of technical and political consensus between the municipalities of Cariri Central and the Government of the State of Ceará.

Social Safeguards

6. A number of subprojects triggered the Bank’s Involuntary Resettlement Policy (OP 4.12). Resettlement Action Plans (RAPs) were prepared for each of these subprojects and in many cases involved the assessment of alternatives to reduce resettlement impacts. The RAP also identified mitigation and compensation measures to reduce and manage the impacts on people, households and businesses. The responsibilities of each stakeholder during the resettlement process, were also described in the RAP. Below a list of all subprojects and number of affected people and mitigation measures.

Table A4.1. Summary of the Social Impacts of each of the Subprojects

Subproject	Affected People	Number of Affected People	Compensation Measure
Central Plazas in Crato	Street vendors and shoe shiners	58	Replacement of kiosks and tents with standardized vendor carts
Rehabilitation of Seminário District	Inhabitants	157	Resettlement to new housing complex, compensation payments and rental coverage
Urban rehabilitation Works in Santana do Cariri	Street vendors	08	Replacement of kiosks and tents and compensation for lost profits
Rehabilitation of South Bypass in Nova Olinda	Street vendors, shop owners and inhabitants	37	Improved facilities and kiosks (as a result of temporary and reversible impacts)
Requalification of Central Area of Farias Brito	Street vendors	16	Improved facilities, construction of kiosks and lease of booths at the municipal market.
Bypass Road in Barbalha	Inhabitants	02	Financial compensation
<i>Roteiro da Fé</i> in Juazeiro do Norte	Street vendors, vehicle and motor taxi drivers	40	Kiosks and improved taxi stops and rest areas.
Bypass in Juazeiro do Norte	Inhabitants	106	Financial compensation, land swaps, buildings and other facilities in case of donations.
Total		424	

Source: SCidades, 2017

7. The design of the Project did not always fully consider the complexity of resettlement activities. In the initial phases of the Project, municipal governments of the respective municipalities were responsible for resettlement activities. This arrangement worked well for relatively simple cases, such as the temporary relocation of a small number street vendors during reconstruction of public plazas. This also generated positive results for on Section 1 of the Juazeiro do Norte Bypass Road, where the municipal government undertook land swaps and devised methods to reduce the number of affected people. It is worth noting that the majority of these properties were in rural areas, were fairly large, and the land to be acquired was unoccupied and amounted to a small and low value proportion of the total property.

8. Resettlement activities were more complex for the works for Sections 2 and 3 of the Juazeiro do Norte Bypass and the *Seminário* District urban upgrading. Resettlement for the *Seminário* District involved the construction of new housing by the municipal government of Crato, though it was not able to deliver a sufficient number of units on time. The municipal government of Juazeiro do Norte did not have sufficient land to continue negotiating land swaps for Sections 2 and 3 of the Bypass Road. In light of this situation, the State Government took a more active role to coordinate and

finance resettlement activities. In Crato, the State worked with Caixa Federal to relocate some families to homes being constructed as part of the *Minha Casa Minha Vida* program (those these units had not yet been delivered at the time of the ICR and residents remained in temporary housing). The State assumed responsibility for the execution and financing of resettlement for Sections 2 and 3 of the Juazeiro do Norte Bypass after it became clear that the municipal government lacked the resources to do so. In both instances, the State ultimately arrived at an adequate solution, though the processes resulted in delays to Project implementation. These experiences suggest that the complexity of the resettlement activities to be undertaken was not fully appreciated in the design of the Project or by the multiple Government actors involved.

Table A4.1. Strengths and Weaknesses of Municipal and State Participation in Resettlement

	Municipal Executed	State Executed
Strength	<ul style="list-style-type: none"> ▪ Streamlined communication between families and municipal authorities ▪ Personalized service given the proximity of social and technical teams to the families 	<ul style="list-style-type: none"> ▪ Adequate financial capacity
Weakness	<ul style="list-style-type: none"> ▪ Lack of financial capacity 	<ul style="list-style-type: none"> ▪ Reduced participation on the part of the municipal government and local residents in the decision making process (plans were only subject to public comment as a result of a request from the Bank team) ▪ Difficulty in access information (data is primarily stored in Fortaleza)

Annex 5. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Monica Alves Amorim	Local Consultant	GFA04	
Jose C. Janeiro	Sr Finance Officer	WFALA	
Luis R. Prada Villalobos	Sr Procurement Specialist	GGO05	
Paul Procee	Program Leader	LCC5C	
Julia Conter Ribeiro	Sr Finance Assistant	WFALA	
Jennifer J. Sara	Director	GWADR	
Eduardo Martin Urdapilleta	Sr Financial Economist	LCSPF	
Fabson Vogel	Financial Management Specialist	LCSFM	
Deborah L. Wetzel	Sr Director	GGODR	
Ming Zhang	Practice Manager	GSU12	
Maria de Fatima de Sousa Amazonas	Sr Rural Development Specialist	GFA04	
Supervision/ICR			
Monica Alves Amorim	Local Consultant	GFA04	
Melissa Bonneton	Jr Professional Associate	LCSUW	
Marcus Vinicius Ferreira Da Silva	Consultant	LCSUW	
Clarisse Torrens Borges Dall Acqua	Sr Environmental Specialis	GEN04	
Nicolas Drossos	Consultant	GGODR	
Soraya Simao Melgaco	Local Consultant	GSU04	
Jennifer J. Sara	Director	GWADR	
Sameh Naguib Wahba Tadros	Director	GSURB	
Eri Watanabe	Local Consultant	GWA04	
Ming Zhang	Practice Manager	GSU12	

(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)
Lending		
FY06		47.7
FY07		133.0
FY08		194.4
FY09		83.2
FY10		119.6
FY11		82.0
FY12		88.7
FY13		147.0
FY14		145.7
FY15		137.7
FY16		98.8
FY17		96.8
Total:		1,374.5

Annex 6. Beneficiary Survey Results

(if any)

Annex 7. Stakeholder Workshop Report and Results - DA
(if any)

Annex 8. Summary of Borrower's ICR and/or Comments on Draft ICR

These are the main excerpts taken from the Borrower's ICR, which was submitted to the Bank on May 3, 2017. This report was prepared in Portuguese and was not translated to avoid any misrepresentation on the Borrower's evaluation of the project. The full Report with Annexes is available in the Project documentation.

AVALIACAO DOS RESULTADOS DO PROGRAMA

1.1. Principais Resultados do Componente de Qualificação Territorial

1. O Componente de Qualificação Territorial prevê a realização de ações e intervenções de natureza física que devem contribuir para o fortalecimento da estrutura urbana e da base econômica da Região Metropolitana do Cariri (Cariri Central), bem como para a melhoria da qualidade de vida de seus habitantes (Apêndice 3).
2. Conforme Acordo de Empréstimo, as ações foram divididas em subcomponentes, sendo o primeiro referente à infraestrutura regional e o segundo relativo à infraestrutura local/municipal.
3. No que tange à Infraestrutura regional, foram planejadas a construção de estradas e sistemas de trânsito, incluindo melhorias no gerenciamento do tráfego. Nesse sentido foram desenvolvidos projetos e obras que consolidaram e subsidiaram os órgãos locais no gerenciamento do tráfego das rodovias construídas e requalificadas no âmbito do Projeto.
4. No decorrer do projeto foram construídas e/ou requalificadas aproximadamente 30 km de rodovias que, em alguns casos, criaram alternativas para aliviar o tráfego de veículos pesados no centro das cidades, como foram os casos das Avenidas do Contorno de Juazeiro do Norte e de Barbalha, facilitando o deslocamento da população da RMC e foram imprescindíveis para os impactos positivos na mobilidade urbana.
5. Vale salientar que, quando são implantadas rodovias com a correta pavimentação e a devida sinalização horizontal e vertical, bem como com iluminação adequada, contribui-se diretamente para a melhoria do sistema de trânsito, fato concretizado na Região do Cariri após as intervenções realizadas.
6. Também no âmbito da Infraestrutura Regional foi prevista a construção do Aterro Sanitário para atender à região do CRAJUBAR e outros municípios. Contudo, a referida obra saiu da carteira de projetos, após inúmeras dificuldades na consolidação do projeto executivo, na definição do local a ser implantado e na apropriação da ideia pelo consórcio que envolvia 10 (dez) municípios que seriam beneficiados pela obra.
7. Após inúmeros estudos e da elaboração e várias revisões do projeto executivo, em 2013 o local escolhido foi o município de Caririáçu, mais especificamente na localidade do Sítio Gravatá. No entanto, não havia unidade entre os entes do Consórcio criado para gestão do Aterro, resultando na discordância tanto da viabilidade do projeto executivo e quanto do local de instalação em Caririáçu.
8. Outro entrave foi a construção do modelo de gestão operacional do aterro que deveria garantir a sustentabilidade política e financeira para a operação deste empreendimento.
9. Nesse ínterim, já em meados de 2014, e ainda com muitas indefinições, constatou-se não mais haver tempo hábil para a construção do aterro dentro do prazo do Acordo de Empréstimo.
10. No âmbito da Infraestrutura municipal, foram desenvolvidas obras de menor amplitude, inscritas em recortes municipais.

11. Em Juazeiro do Norte, foram propostas melhorias e/ou construções em áreas urbanas e de instalações mais utilizadas pelos romeiros e habitantes da cidade. Como exemplo o projeto Roteiro da Fé, cuja proposta foi a recuperação das praças nos entornos das igrejas e a conexão entre elas através da qualificação das ruas/logradouros.

12. O conceito do projeto consistia na padronização das vias, passeios, mobiliários, iluminação e paisagismo, demarcando o caminho percorrido pelos romeiros. Foram requalificadas as praças, conforme o projeto. Entretanto, essa interligação proposta entre as igrejas não foi realizada devida a constatação de haveria altos custos para a efetivação das indenizações, cuja responsabilidade de pagamento caberia à Prefeitura Municipal de Juazeiro do Norte que alegou incapacidade financeira para tal intento.

13. No Crato, foram executadas obras que contribuíram sobremaneira para a melhoria da infraestrutura e instalações públicas.

14. A obra de maior notoriedade foi a Obra de Requalificação Ambiental e Urbanização do Bairro Seminário. Além disso, foram requalificadas 04 (quatro) praças no centro da cidade e o trecho da Rua João Pessoa que as interligam, onde o conceito adotado foi o do traffic calm, com a rua privilegiando o pedestre com passagens de nível elevado e alargamento dos passeios.

15. Outra obra que trouxe grandes benefícios foi a construção da estrada que interliga o Crato ao distrito de Bela Vista, cujo acesso era extremamente precário. Vale salientar que ao longo dessa estrada está sendo implantado o novo Distrito Industrial do Crato.

16. Em Barbalha foram propostas algumas intervenções que requalificaram o centro histórico da cidade, como a pavimentação das ruas e passeios, mantendo a atmosfera de cidade histórica, com pedra tosca nas vias e tijolinho de olaria nos passeios, além da sinalização turística, indicando locais e descrevendo casas e museus históricos. Com a implantação da Avenida do Contorno de Barbalha, um trecho de 2,4 km, foi desviado do centro da cidade todo o trânsito pesado, contribuindo sobremaneira para a permanência do clima bucólico existente. Também foi requalificada a urbanização da Vila do Caldas que abrigará o Teleférico do Caldas¹⁶, ainda em construção pelo Governo do Estado.

17. O Museu do Engenho Tupinambá, previsto na carteira inicial de projetos, foi removido logo no início do projeto, ainda em 2010, por um desejo manifesto do próprio município de Barbalha, quando os gestores da época revelaram que seria de maior valia para o município que fossem feitos investimentos na infraestrutura e mobilidade urbana.

18. Nos demais municípios, foram realizados investimentos voltados para o incentivo ao turismo na região, através da requalificação da entrada de algumas cidades, como a obra realizada no acesso de Nova Olinda, Caririagu, Jardim e também no acesso a Santana do Cariri, que além disso, recebeu a implantação de 02 (duas) novas praças, uma voltada para a arte (com um anfiteatro), amplos espaços de convivência e contemplação com 08 (oito) quiosques que abrigaram os ambulantes e donos de barraca que ocupavam anteriormente um espaço em frente à escola municipal, espaço esse que recebeu a outra praça, estimulando a convivência salutar entre os alunos, retirando o comércio de bebidas alcoólicas dessa área.

19. A construção do Parque das Macaúbas em Caririagu também foi inviabilizado em virtude da área de intervenção ser de propriedade privada, bem como devido aos custos onerosos com a desapropriação.

¹⁶ A obra do Teleférico do Caldas faz parte dos investimentos do Governo do Estado na Região do Cariri, porém com recursos do Tesouro Estadual.

20. O município de Farias Brito foi agraciado com uma obra que transformou toda a sua realidade, no qual foi requalificada toda a sua área central e construídas 05 (cinco) novas praças. Farias Brito é uma dos principais acessos ao Cariri e sua via principal, que vem a ser a continuidade da CE – 060, percorre toda a cidade interligando as praças construídas.

21. Em Missão Velha foi construída a estrada que interliga o município ao distrito de Cachoeira, beneficiando o acesso a um dos principais pontos turísticos da região, a Cachoeira de Missão Velha, visitada por milhares de pessoas.

22. Destaca-se que foram realizadas obras em todos os municípios da Região Metropolitana do Cariri, tendo estas obras repercussão regional, uma vez que trazem benefícios para todos os municípios integrantes da RMC e demais municípios vizinhos.

1.2. Obras Categoria A e Equipamentos Públicos

Obra de Recuperação Ambiental e Urbanização do bairro Seminário

23. No âmbito do Projeto, a obra de Recuperação Ambiental e Urbanização do bairro Seminário foi caracterizada como uma das intervenções principais da carteira de ações, estando alocada no subcomponente de Infraestrutura Municipal.

24. A execução da obra objetivou atender uma demanda antiga e necessária da população do município do Crato/CE, tendo em vista a degradação ambiental e a consolidação de assentamento precário em um dos bairros mais antigos e tradicionais da cidade.

25. Situado próximo ao centro da cidade e com vista para a chapada do Araripe, o bairro Seminário recebeu este nome por abrigar em sua área, desde o início do Século XX, o Seminário de São José, ligado à Igreja Católica.

26. Após vários anos de ocupação irregular, a área tornou-se insalubre em virtude da acumulação de lixo e risco de desmoronamento da encosta, motivado pela existência de uma voçoroca popularmente denominada de “buraco do vulcão”.

27. O bairro Seminário vinha sofrendo processos erosivos intensos, devido principalmente ao desmatamento generalizado. Somava-se a isto falhas no manejo agrícola e pecuário do solo, a ocorrência de expansão urbana sem a adequada realização de obras de drenagem e a concentração forçada do escoamento das águas pluviais, resultando em um catastrófico processo de erosão rural e periurbana, com formações de ravinas e voçorocas. Essas voçorocas ainda sofriam com graves problemas de contaminação das águas superficiais e subterrâneas.

28. Sem uma coleta rotineira dos resíduos sólidos, atrelada a inexistência de esgotamento sanitário, drenagem das águas pluviais e associadas ao baixo nível de escolaridade da população residente, ano após ano o que antes era uma característica geológica, com a intervenção antrópica, tornou-se uma questão social e ambiental a ser superada pela comunidade e pelo poder público.

29. Perante esta condição peculiar, a obra contemplou parte da encosta do Bairro Seminário, compreendendo uma área de intervenção de 14,3 hectares. A proposta contemplou contenção de encosta e recomposição da vegetação do local, além da execução de uma série de serviços como: drenagem, terraplanagem, iluminação pública, paisagismo, sinalização e urbanização de espaços públicos de lazer. Também foi criada uma via paisagística no topo da encosta com extensão total de 1,2 km e realizados serviços de esgotamento sanitário de parte da bacia do Seminário, atendendo, aproximadamente, 12.500 habitantes, além da construção da Estação de Tratamento de Esgoto - ETE.

30. Esta obra proporcionou para a localidade condições de habitabilidade e segurança ambiental, de modo a gerar qualidade de vida para a comunidade, através de ações intersetoriais de saneamento, habitação, lazer e, por conseguinte, segurança pública e turismo.
31. Refletindo as condições descritas no período anterior à intervenção, apresentam-se os dados do Sistema de Informação da Atenção Básica – SIAB do município do Crato, no qual demonstra o quantitativo dos casos de dengue que vitimaram os moradores.
32. No período compreendido entre 2011 a 2013, teve-se a ocorrência de 272 (duzentos e setenta e dois) casos de pessoas infectadas com a dengue no bairro do Seminário, segundo dados da Secretária de Saúde do Município do Crato (2017). Sabe-se que a referida doença é infecciosa e causada por um arbovírus, sendo transmitida pelo mosquito *Aedes aegypti*. A redução da doença se dá através da eliminação do mosquito transmissor.
33. Desta feita, entende-se que a recuperação ambiental da área do Seminário, através da retirada do lixo na voçoroca e compactação da área degradada, eliminou vários focos de criadouros dos mosquitos, contribuindo para a eliminação dos casos de doença no bairro.
34. Esta informação é refletida nos dados referente aos anos de 2014 a 2016, período durante e após a execução da obra. Nestes anos, a Secretaria de Saúde do Crato não obteve confirmação de nenhum caso de dengue no bairro.
35. Este fato também é comprovado mediante os dados da destinação do lixo disponibilizados pela Prefeitura do Crato, quando se compara o quantitativo do ano de 2010, período anterior a execução da obra com o ano de 2014, período de execução da obra. No ano de 2010, 55 (cinquenta e cinco) famílias moradoras do bairro Seminário, jogavam seu lixo ao céu aberto, caindo para 36 (trinta e seis) famílias no ano de 2014 (SIAB, 2017)¹⁷.
36. Entende-se que apesar de ser uma pequena redução dos números, já se percebe que houve, ainda no começo da obra, uma mudança no comportamento das famílias, que passaram a não mais destinar seu lixo caseiro na voçoroca.
37. Com a execução da obra, o cenário do bairro Seminário foi modificado. O que antes era inóspito tornou-se um local agradável, favorecendo a convivência social e o fortalecimento de vínculos comunitários.
38. A área urbanizada e esteticamente qualificada fomentou a utilização dos espaços por variados grupos da comunidade. Crianças, jovens, adultos e idosos compartilham as praças, as áreas de lazer e as calçadas, transformando o espaço urbano numa área frequentada e empoderada pelos seus moradores.
39. Coexistem nos espaços públicos atividades comerciais, esportivas e de socialização. Ao final das tardes pode-se ver pessoas fazendo cooper na via paisagística, aulas de zumba e ginástica funcional sendo realizadas rotineiramente, turistas e visitantes fotografando-se ao contemplarem a vista, bem como crianças brincando e adultos interagindo nas praças.
40. Este empoderamento pode ser identificado nas falas dos próprios moradores da encosta, porquanto da realização da pesquisa de satisfação realizada pela Secretaria das Cidades no ano de 2017:.

“Faço caminhada e levo minha filha para brincar” [Entrevistado 1].

¹⁷ Os dados do SIAB foram disponibilizados no ano de 2017, contudo apresentam uma série entre 2010 até 2014, não sendo disponibilizado pelo município os dados de 2015 e 2016.

“A gente fica na calçada” [Entrevistado 39].

“Fazemos caminhada e academia. Minha filha brinca na praça” [Entrevistado 41].

“Hoje as pessoas se falam mais, tem mais gente visitando” [Entrevistado 1].

“Quando eu vou fazer caminhada na encosta conheço mais gente e faço amizades” [Entrevistado 9].

41. O sentimento de pertencimento para com o novo espaço de uso coletivo gera várias consequências positivas para a vivência em comunidade, dentre elas a percepção sobre a segurança do local, uma vez que espaços mais frequentados, tornam-se mais seguros de se transitar. Ratificando essa compreensão, apresenta-se os dados da supracitada pesquisa de satisfação.

42. Com relação à percepção de segurança, 92% dos entrevistados se sentem seguros em morar, trabalhar ou transitar pelo bairro, conforme figura 40:

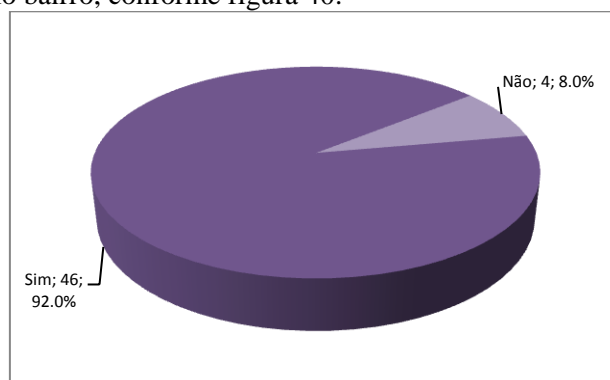


Figura A8.1: Percepção de segurança pelo usuário e pela família, Bairro Seminário, Crato, 2017.

43. Complementando a ideia do sentimento de pertencimento, apresenta-se os dados da Secretaria de Segurança Pública quanto aos crimes contra ao Patrimônio Público no município do Crato.

Ano	Número de crimes
2011	1,194
2012	1,783
2013	1,635
2014	1,383
2015	993

Fonte: IDECI, 2017.

44. Observa-se que no ano de 2015 houve uma redução de crimes contra o patrimônio público, tendo em vista o registro pela Secretaria de Segurança Pública do Estado de 993 (novecentos e noventa e três) crimes, perfazendo 390 (trezentos e noventa) menos crimes em relação ao ano de 2014.

45. Apesar dos dados apresentarem a realidade de toda a municipalidade, considera-se que, pelo fato do bairro Seminário ser o mais populoso do Crato, estes dados refletem principalmente a realidade do bairro, uma vez que no ano de 2015 houve a inauguração da parte principal da obra, compreendida entre as ruas Manoel Almiro de Lima à Diógenes Frazão.

46. Ainda nesta obra foram executadas 923 (novecentas e vinte e três) ligações intradomiciliares à rede de esgoto, sendo o referido bairro o único do município a possuir uma estação de tratamento de esgoto e o sistema de esgotamento sanitário.

47. No sentido de inibir o escoamento de esgotos ao céu aberto e reduzir consideravelmente a poluição local e a possibilidade de desmoronamento da área da encosta, implantou-se uma rede

coletora de esgoto na área de intervenção, bem como executou-se uma estação de tratamento de esgoto – ETE a fim de propiciar a saúde coletiva, com a redução de doenças virais e/ou infecciosas.

48. Desta forma, a ETE visa ao tratamento do esgoto proveniente das 3000 residências¹⁸ (aproximadamente 12000 pessoas) presentes no bairro Seminário. A ETE executada caracteriza-se pela tecnologia de tratamento biológico de esgotos, Reator UASB, baseada na decomposição anaeróbia da matéria orgânica, na qual consiste em uma coluna de escoamento ascendente, composta de uma zona de digestão, uma zona de sedimentação e o dispositivo separador de fases gás-sólido-líquido.

49. Além das ações citadas, a execução da obra possibilitou a retirada de quase 160 famílias da área de risco, reassentando parte delas em conjuntos habitacionais com melhores condições de habitabilidade e salubridade, garantindo, portanto o direito à moradia digna.

50. Mediante dados apresentados, infere-se que a obra de Recuperação Ambiental e Urbanização do bairro Seminário cumpriu com seu objetivo de reabilitação ambiental com restauração do sistema de drenagem para o desvio adequado das águas pluviais, além do reassentamento das famílias residentes em área de risco e restauração da área em parques urbanos, conforme estabelecido no Acordo de Empréstimo.

Avenida do Contorno de Juazeiro do Norte

51. Na carteira do Projeto Cidades do Ceará – Cariri Central, foi executado o Projeto da Avenida do Contorno de Juazeiro do Norte – Trechos 01, 02 e 03. Esse projeto, faz parte de um anel circunviário (anexo 01) que consiste na construção de aproximadamente 42 km de via.

52. A soma dos 03 trechos perfazem um total de 8,56 km e foram construídos ao longo dos trechos duas obras de arte especiais (viadutos). Essa obra contempla a implantação de uma via pavimentada composta de pista dupla de rolamento com 7,00 (sete) metros de largura cada, com revestimento em CBUQ, além de canteiro central com ciclovias, bueiros, sinalização horizontal e vertical, iluminação e passeios.

53. A execução da obra objetivou reduzir o tráfego pesado do centro de Juazeiro do Norte, mais especificamente e principalmente, durante o período das romarias e é imprescindível para que os impactos positivos na mobilidade urbana e conseqüentemente, os benefícios sociais, econômicos e ambientais para a cidade sejam alcançados. Contudo, para medir o impacto gerado por esta intervenção será realizado no ano de 2019 um estudo de trânsito e transporte.

54. Durante o andamento do Projeto, devido a preocupação com a garantia dos recursos disponíveis para a desapropriação, optou-se por executar a licitação da avenida em questão por trechos. Primeiramente foi licitado o trecho 01 com 3,4 km de extensão e em seguida os trechos 02 e 03, com 5,16 km de extensão.

55. Em 2013, foi iniciada a obra do trecho 01, após a emissão de sua ordem de serviço em 22/07/2013. Toda a desapropriação desse trecho correu por conta da Prefeitura Municipal de Juazeiro do Norte. Ocorre que desde o seu início, houve grandes dificuldades na liberação das frentes de obra em razão da demora da desapropriação por parte da prefeitura, e além disso, em decorrência da existência de interferências da rede elétrica, da iluminação pública e da rede de telefonia, bem como da identificação da existência de uma adutora da CAGECE que percorria o eixo da via em questão.

¹⁸ Número de acordo com os dados do IBGE 2010.

56. Além disso, após um período de intensas chuvas, no início do referido ano, foi verificada a necessidade de revisão do projeto executivo, principalmente no segmento localizado entre as estacas 746 e 806, no que diz respeito à locação, nivelamento e seção das obras de arte correntes, assim como ao greide de terraplenagem. Dentro dessa realidade, o referido projeto teve que ser readequado, bem como o estudo hidrológico da bacia que abrigou a obra contratada teve que ser refeito.

57. Toda essa problemática perdurou de 23 de abril de 2014, quando a obra fora paralisada pelos motivos acima elencados até o dia 26 de janeiro de 2015 quando foi emitida a ordem de reinício. Em 16 de novembro de 2015, foi iniciada a obra dos trechos 02 e 03 e todo o seu projeto foi atualizado e adequado a realidade encontrada no local, objetivando principalmente reduzir ao máximo o número de desapropriações, mantendo as normas de segurança. Nesse projeto revisado, foram alcançados os seguintes objetivos:

- i) Redução de aproximadamente 74% do impacto social, uma vez que os custos de desapropriação foram drasticamente diminuídos e alguns proprietários das terras na área da intervenção, se dispuseram a doar as terras necessárias para a plena execução da obra;
- ii) Melhoria qualitativa no que se refere à acessibilidade e segurança, devido à inserção de ciclovia no canteiro central;
- iii) Proposta de drenagem adequada ao novo estudo hidrológico, elaborado depois de verificados os impactos causados no último ano no período das quadras invernosas. A nova proposta considerou as ruas perpendiculares que “desembocam” na rodovia projetada;
- iv) Adoção de medidas visando a redução do risco de acidentes na rede viária, aumentando de forma considerável a segurança, especificamente nos cruzamentos com a linha férrea, onde foram incluídos 02 (dois) viadutos ao longo dos Trechos 2 e 3 (obras d’arte especiais);
- v) Conexão entre o Trecho 3 e a Avenida Padre Cícero, a proposta original terminava a aproximadamente 300 metros da mesma, não chegava à Avenida Padre Cícero, o que inviabilizava a ligação da Avenida do Contorno com o município de Juazeiro (obras d’arte especiais).

58. Ocorre que durante a execução das obras constatou-se a necessidade de uma nova revisão e adequação do projeto executivo da Avenida do Contorno de Juazeiro do Norte – trechos 2 e 3, visando a uma melhoria na qualidade da execução da obra, além de oferecer maior segurança à população que irá se beneficiar da referida intervenção. Dentre as diversas revisões e adequações realizadas, estão presentes:

- i) Inclusão de iluminação da via e para atender à adequada luminosidade, instalaram-se postes a cada 35 metros em sua extensão com duas pétalas cada.
- ii) Revisão do Projeto Planialtimétrico que buscou considerar a conservação da Vegetação Ciliar às margens do Riacho Salgadinho, com elevação da cota final de terraplenagem (greide) de forma a garantir a integridade da estrada livrando-a de possíveis inundações.
- iii) Revisão dos Projetos de Obras d’Arte Correntes e Drenagem que buscou atender de uma forma mais completa as bacias hidrológicas onde o trecho está inserido e a elevação da cota final de terraplenagem, sendo necessário o acréscimo de novos bueiros como também a mudança de localização de outros.
- iv) Revisão no Projeto de Terra Armada – rampas de acesso (montante e jusante) aos Viadutos 1 e 2 com o objetivo de evitar uma sobrecarga na laje da galeria da drenagem abaixo do viaduto 1, executou-se um aumento na inclinação nas rampas da terra armada, dessa forma, ampliando a área de terra armada, conseqüentemente, ampliou-se a quantidade de aterro, placas e fitas metálicas.
- v) Revisão no Projeto de Obras d’ Arte Especiais – Viadutos 1 e 2 no sentido de não sobrecarregar a laje da galeria abaixo da terra armada do viaduto 1, realizou-se uma alteração

no traçado da via. Assim, houve uma adequação do viaduto 1 para o acompanhamento do novo traçado.

59. É de suma importância relatar que também na implantação dos trechos 02 e 03, assim como na implantação do trecho 01, ocorreram entraves no que tange a desapropriação das áreas para liberação das frentes de obra, retardando a plena execução e avanço desta, o que consequenciou a previsão para sua conclusão em junho de 2017.

Vila da Música

60. O Projeto da Vila da Música consiste na construção de uma nova edificação projetada especialmente para abrigar a escola de música existente no distrito de Belmonte, situada a aproximadamente 07 (sete) quilômetros da cidade do Crato, sendo esta administrada pela Sociedade Lírica de Belmonte (Solibel), cuja fundação se deu na década de 1970, capitaneada pelo Padre Ágio Augusto Moreira.

61. A Solibel tem como temas centrais a socialização, a formação humana e o ensino musical, diretrizes que serão incorporadas à Vila da Música, fomentando a cidadania através da educação musical e criando oportunidades para o desenvolvimento humano, econômico e territorial sustentável da região do Cariri Cearense.

62. A abordagem do projeto foi a de criar um núcleo de ensino musical lúdico e acusticamente efetivo, com menores custos de manutenção possíveis, permitindo paralelamente a locação de espaços para eventos externos, implementando os planos de sustentabilidade financeira para a instituição. Desta feita, constaram no programa de necessidades: auditório, biblioteca, salas de aulas individuais e grupais, estúdio, setor administrativo, refeitório, cozinha, despensa, vestiários, banheiros, laboratório de informática, oficina de instrumentos, quadra poliesportiva e estacionamento.

63. A Obra fez parte do processo licitatório CPN nº 20130007/CIDADES/CCC, com custo estimado de R\$ 3.122.977,94 (três milhões cento e vinte e dois mil, novecentos e setenta e sete reais e noventa e quatro centavos), que resultou na contratação, no valor de R\$ 3.062.553,13 (três milhões sessenta e dois mil, quinhentos e cinquenta e três reais e treze centavos), da construtora BORGES CARNEIRO Ltda. através da assinatura do Contrato nº025/CIDADES/2014 em 07 de maio de 2014. Com um aditivo de valor necessário no decorrer da obra, seu custo total ficou em R\$ 3.179.731,52 (três milhões cento e setenta e nove mil setecentos e trinta e um reais e cinquenta e dois centavos).

64. Com a conclusão da obra, e idealizando uma melhor gestão, deliberou-se que a Secretaria de Cultura - SECULT deveria fazer a gestão do referido equipamento público, uma vez que detém a expertise necessária para desempenhar a função em questão.

Centro Multifuncional do Cariri

65. A construção do Centro Multifuncional do Cariri foi prevista, no âmbito do acordo de empréstimo, enquanto uma ação do componente II inserida no subcomponente Suporte físico às atividades econômicas.

66. O Centro Multifuncional do Cariri, localizado em Juazeiro do Norte, é um equipamento voltado à prestação de serviços à população, abrangendo uma oferta de serviços tecnológicos, culturais, atividades educacionais, e prioritariamente, os serviços relativos à administração pública estadual e municipal.

67. Possui instalado em suas dependências sete instituições que prestam serviços à sociedade nas mais diversas modalidades, sendo o maior atrativo para o prédio a prestação de serviços pelo “Vapt

Vupt”, que consiste numa unidade administrativa gerenciada pela Secretaria da Justiça do Ceará que agrega vários serviços de atendimento ao cidadão como emissão de documentos, atendimento pelas concessionárias de abastecimento de água e energia elétrica, acesso a consulta aos sistemas de inadimplência, acesso ao cadastro único do Governo Federal, dentre outros.

68. Diariamente o equipamento recebe cerca de 400 visitantes por dia, sendo previsto o aumento desta demanda, porquanto da instalação de novas entidades públicas e privadas antevista para os próximos semestres.

69. Após dois anos sob a gestão da Secretaria das Cidades, por meio de contrato de gestão com a organização social Instituto Centro de Ensino Tecnológico – CENTEC, o Governo do Estado do Ceará deliberou que a gestão do Centro Multifuncional do Cariri ficará sob a responsabilidade da Secretaria de Planejamento e Gestão – SEPLAG, oficializado por meio de Termo de Transferência de Gestão de Bem Público, publicado no DOE no dia 09 de fevereiro de 2017, sendo pensando, no âmbito da nova administração a melhor forma de gestão para o CMC, de modo que o equipamento possa se auto-sustentar e até mesmo gerar arrecadação para o Estado.

70. Isto posto, entende-se que a disponibilização de diversos serviços em um único lugar facilita o atendimento às demandas do cidadão usuário que ganha em economia de tempo, deslocamento e até financeira, convergindo com o objetivo do supracitado subcomponente que previa a eliminação de gargalos de infraestrutura, através de oferta de serviços antes encontrados de forma incipiente ou inexistente na Região do Cariri. (Apêndice 6).

1.3. Manutenção das Obras

71. Com a finalidade de auxiliar as Prefeituras Municipais da Região do Cariri Central, as quais foram beneficiadas com obras através do Projeto, a UGP elaborou o “Plano de Manutenção e Operação de Obras”.

72. Este Plano apresenta diretrizes para o monitoramento e manutenção das infraestruturas executadas, contribuindo para o planejamento de sua conservação, recuperação e proteção. Para tanto, encontra-se estruturado nos seguintes tópicos: Tipologia de Projetos (i), Manutenção e Operação (ii) e Diretrizes orçamentárias (iii).

73. Desta forma, espera-se que as Prefeituras utilizem o referido Plano de Manutenção no sentido de fazer valer os benefícios recebidos através do Projeto Cidades do Ceará – Cariri Central e manter os espaços públicos agradáveis, seguros e em bom estado para o devido uso da população, que é o maior beneficiado pela inserção dos novos espaços públicos criados e pela requalificação dos espaços públicos já existentes, bem como pela correta e contínua manutenção dos mesmos.

1.4. Avaliação do nível de satisfação da população beneficiada com as intervenções físicas do Projeto

74. Objetivando conhecer a visão dos cidadãos usuários da Região do Cariri Central acerca da execução das ações do Projeto Cidades do Ceará, realizou-se pesquisas de satisfação nas principais obras executadas e finalizadas, estabelecendo como método de aferição a aplicação de questionários com questões objetivas e subjetivas.

75. Os entrevistados foram selecionados ao acaso, convidados a participar da pesquisa e mediante ao seu consentimento, submetidos a um questionário no qual inquiria sobre: i) a satisfação da população com o resultado obtido; ii) a promoção ou melhoria da acessibilidade/mobilidade das pessoas; iii) a utilização dos espaços por parte do usuário e sua família; iv) as sugestões acerca de melhorias na intervenção, dentre outros.

76. Desta feita, aplicou-se questionários com 354 (trezentos e cinquenta e quatro) moradores, comerciantes e transeuntes do entorno das nove obras: Avenida do Contorno de Juazeiro do Norte (Trecho 1), Obra de Recuperação Ambiental e Urbanização do bairro Seminário, Crato/CE, Roteiro da Fé em Juazeiro do Norte, Avenida do Contorne de Barbalha, Urbanização do Centro Histórico de Barbalha, Pavimentação Asfáltica Da Estrada Vicinal de Acesso Crato – Bela Vista, Urbanização de Farias Brito, Urbanização da Avenida Perimetral Sul de Nova Olinda e Urbanização das Praças Centrais do Crato.

77. Os resultados obtidos foram tabulados e apresentados nos Relatórios de Pesquisa de Satisfação por obra constantes como apêndice 4 deste Relatório.

78. Os principais dados refletem que mais de 50% (cinquenta por cento) da população entrevistada está satisfeita com a execução das obras e, especificamente, nas obras da Avenida do Contorno de Juazeiro do Norte (Trecho 1) e Pavimentação Asfáltica da Estrada Vicinal de Acesso Crato à Bela Vista, mais de 90% (noventa por cento) dos entrevistados afirmaram estar satisfeitos totalmente, enquanto que na Obra de Recuperação Ambiental e Urbanização do Bairro Seminário não houve registro de insatisfação.

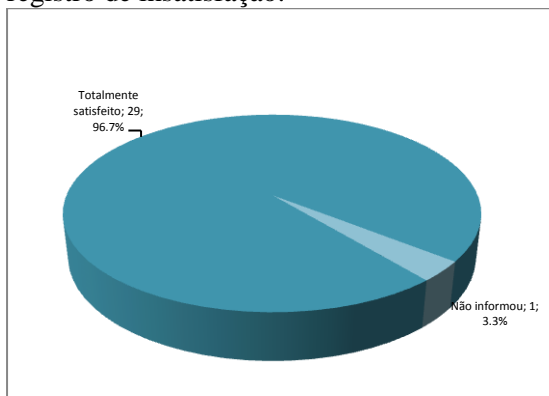


Figura A8.2: Grau de satisfação do entrevistado em relação à obra Av. do Contorno, Juazeiro do Norte (Trecho 1), 2017.

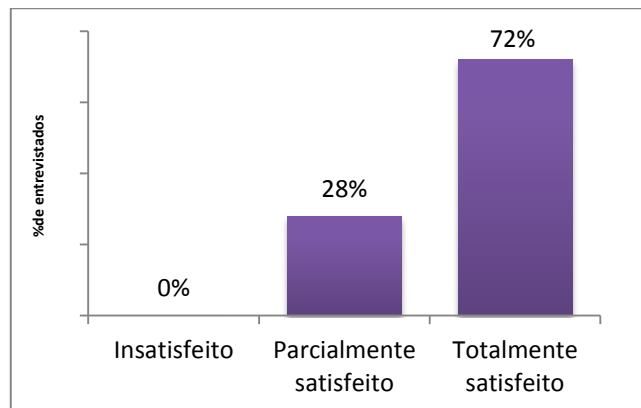
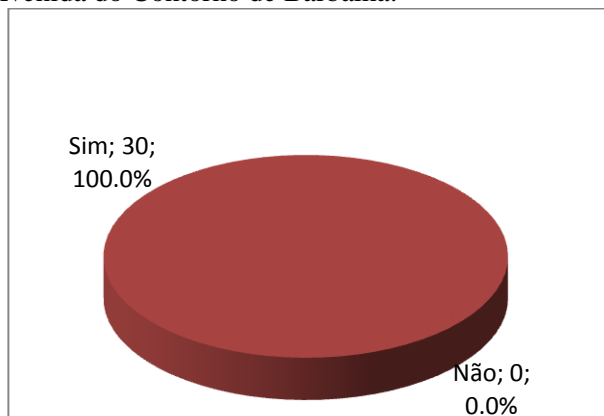


Figura A8.3: Grau de satisfação do entrevistado em relação à obra de Recuperação Ambiental e Urbanização do bairro Seminário, Crato/CE, 2017.

79. Nas falas dos entrevistados identificam-se vários benefícios advindos com realização das intervenções, e, devido ao fato da maioria contemplar obras viárias, enfoca-se a questão da promoção e melhoria da mobilidade urbana, com redução de tempo de deslocamento, bem como utilização de outras modalidades de transportes, como a bicicleta, conforme as falas dos moradores do entorno da Avenida do Contorno de Barbalha:



“Melhorou o acesso de carros e pedestres e a pavimentação da via” [Entrevistado 12].

“Melhorou o trânsito do centro, o acesso para outros pontos dos bairros” [Entrevistado 27].

Figura A8.4: Opinião do entrevistado quanto à melhoria da acessibilidade/mobilidade, Av. do Contorno,

Barbalha, 2017.

80. Conforme depoimento dos entrevistados, identifica-se a utilização dos espaços urbanos revitalizados para diversas atividades e por diversos grupos sociais, dando às cidades novos usos e aspectos. Neste sentido, apresenta-se os dados levantados na pesquisa realizada com os moradores do Seminário:

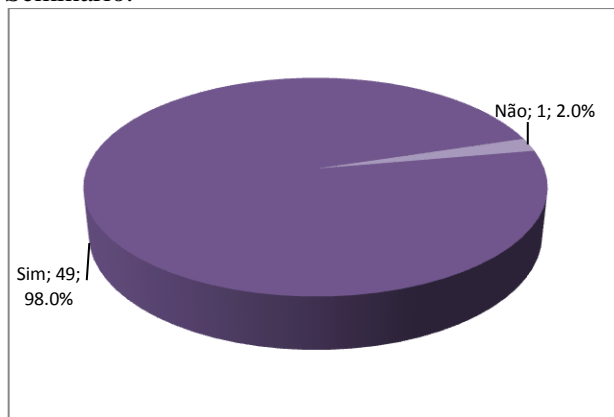


Figura A8.5: Utilização dos espaços pelo usuário e pela família, Bairro Seminário, Crato, 2017.

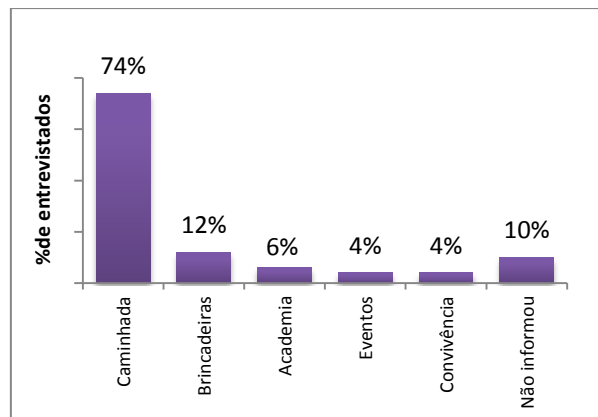


Figura A8.6: Tipo de atividade realizada pelo usuário e pela família, Bairro Seminário, Crato, 2017.

81. Conforme os figuras 44 e 45, 98% dos entrevistados do bairro Seminário utilizam os espaços revitalizados com suas famílias (via paisagística, praças, etc.), sendo realizadas como principais atividades caminhadas, espaço de entretenimento para crianças com a prática de brincadeiras, academia ao ar livre, além de espaço para eventos e convivência social.

82. Os cidadãos usuários também apontaram algumas oportunidades de melhoria, sendo a mais citada a necessidade de manutenção dos equipamentos e vias. Contudo, as ações de manutenção competem às prefeituras municipais beneficiadas. Conforme dito anteriormente, com intenção de orientar os poderes públicos municipais, a UGP elaborou o Plano de Manutenção e Operação de Obras, que apresenta as diretrizes para o monitoramento e manutenção das infraestruturas executadas, contribuindo para o planejamento de sua conservação, recuperação e proteção.

83. Mediante dados apresentados, entende-se que a população, de um modo geral, sente-se satisfeita com a execução das obras realizadas no âmbito do Projeto Cidades do Ceará – Cariri Central e que estas, na percepção dos cidadãos, trouxeram vários benefícios para a Região Metropolitana e mais cidades do Cariri.

1.5. Principais Resultados do Componente Inovação e Apoio aos Arranjos Produtivos Locais – APLs Calçado e Turismo

84. O Componente de Inovação e Apoio aos Arranjos Produtivos Locais (Componente II) envolve um conjunto de ações de natureza econômica (nas áreas de capacitação, infraestrutura, marketing, dentre outras), complementares entre si, que visam fortalecer e desenvolver as atividades econômicas endógenas com maior potencial de transbordamento da Região Metropolitana do Cariri. Inicialmente, foram selecionados os setores de Calçados e de Turismo.

85. Para efeito de implementação, o Componente II está composto de quatro subcomponentes, conforme a descrição a seguir:

- Subcomponente II.1 – Organização e capacitação dos atores: ações voltadas para o fortalecimento da governança e a qualificação dos atores, através de capacitação profissional, consultorias empresariais e estudos, planos e pesquisas.
- Subcomponente II.2 – Suporte físico às atividades econômicas: ações voltadas para a construção ou reforma de equipamentos e aquisição de bens, com o intuito de dar suporte ao setor de turismo e de calçados
- Subcomponente II.3 – Fortalecimento do ambiente empresarial: ações voltadas para a melhoria do ambiente de negócios, simplificação de processos e eliminação de barreiras através da articulação com instituições de apoio (financeiras, universidades, centros tecnológicos) tendo como linha de atuação (i) apoio à eliminação de barreiras e simplificação de processos administrativos; (ii) incentivo ao acesso a mecanismos de financiamento; e (iii) incentivo a políticas de atração de novas empresas.
- Subcomponente II.4 – Marketing para os Arranjos Produtivos Locais: ações voltadas especialmente para fomentar a atividade turística, como apoio à eventos, feiras, elaboração de material promocional, através de políticas de marcas e produtos e incentivo à promoção dos dois setores econômicos definidos.

86. Durante a implementação do Projeto, o Componente II se dedicou, inicialmente, às atividades de apoio aos dois setores, calçados e turismo (Apêndice 8). Para o Setor de Turismo foram realizadas diversas atividades envolvendo capacitação, fortalecimento institucional, marketing e melhorias de infraestrutura. Dentre estas atividades destacamos a especial atenção dada ao Geopark Araripe, devido aos seus atributos exclusivos. Embora tenham sido realizados investimentos gerais para o Setor de Turismo, como a elaboração do Plano de Desenvolvimento Integrado do Turismo Sustentável que busca identificar projetos prioritários para alavancar o turismo na Região do Cariri, a UGP focou esforços e recursos com o objetivo de apoiar, especificamente, o Geopark Araripe (Apêndice 9).

87. Para o setor de calçados foram iniciadas ações voltadas para o fortalecimento deste setor como a execução da obra de complementação do Centro Multifuncional do Cariri (CMC) e consultorias para elaboração do Plano de Gestão do CMC. No entanto, essas atividades desempenhadas não foram suficientes para contribuir de forma efetiva para o avanço do setor calçadista, e tendo em vista já ter transcorrido a metade do tempo estabelecido para execução total do Projeto, optou-se pela exclusão das atividades de apoio durante a Reestruturação e a Avaliação de Meio Termo.

88. O investimento do Componente II foi no valor de R\$ 20.643.879,46 (vinte milhões, seiscentos e quarenta e três mil, oitocentos e setenta e nove reais e quarenta e seis centavos) envolvendo o total de 37 (trinta e sete) ações/contratos nas seguintes categorias: (i) 22 (vinte e duas) ações de aquisições de bens e serviços, (ii) 13 (treze) consultorias individual e de firmas, e (iii) 02 (duas) obras de infraestrutura.

89. Do investimento total, R\$ 6.377.887,99 (seis milhões, trezentos e setenta e sete mil, oitocentos e oitenta e sete reais e noventa e nove centavos) foram destinados para ações de apoio ao Setor de Turismo, R\$ 79.214,05 (setenta e nove mil, duzentos e quatorze reais e cinco centavos) foram destinados para atividades de apoio geral à Unidade de Gerenciamento do Projeto (UGP) e cerca de R\$ 14.186.777,42 (quatorze milhões, cento e oitenta e seis mil, setecentos e setenta e sete reais e quarenta e dois centavos) voltados para os investimentos no Setor de Calçados.

90. O alto investimento destinado ao Setor de Calçados se explica devido ao valor da obra de complementação do CMC, uma vez que a priori o CMC tinha o objetivo de acomodar um Centro de Inovação Tecnológica (CITE) para ofertar serviços tecnológicos para as micro e pequenas empresas do setor calçadista, especialmente àquelas de capacitação e prestação de serviços em CAE/CAD/CAM (Computer Aided Engineering/Computer Aided Design/Computer Aided Manufacturing).

91. Apesar da realização de atividades voltadas para o setor de calçados, no decorrer da implementação do Projeto Cidades do Ceará houve dificuldades na execução destas ações em virtude de adversidades como o desgaste na articulação com o setor privado (fabricantes locais, pequenos produtores informais) que se prolongou demasiadamente durante algum tempo, impossibilitando, desta maneira, a execução de algumas atividades planejadas.

92. Tal fato comprometeu sobremaneira a realização de ações citadas na Parte II.1 (b) (i) e na Parte II.5 do Acordo de Empréstimo que trata especificamente da “Operação e equipamento de um centro público privado de inovação tecnológica e design” e do “Fornecimento de assistência técnica para facilitar o desenvolvimento dos Núcleos Chave, incluindo a facilitação de trabalhos com líderes privados e públicos, facilitação de reuniões de grupos de trabalhos dos núcleos, supervisão de subgrupos para o desenvolvimento e implementação detalhados de iniciativas, condução de análise dos núcleos, desenvolvimento de estratégias e planos e aconselhamento sobre desenvolvimento organizacional.”

93. A Parte II.6 trata de “Desenvolvimento de um plano de transporte e logística para melhorar os padrões de transporte de cargas pesadas, identificar pontos estratégicos na indústria de calçados dentro da Região Central do Cariri e facilitar a mobilidade de turistas nesta região”. Registra-se que ainda durante a execução do Acordo de Doação nº TF 090852-BR foi realizado um “Estudo de Trânsito de Transporte” para a região central do Cariri. Como consequência desse estudo, já na implementação do Projeto Cidades do Ceará foram executadas obras viárias como a Avenida do Contorno de Juazeiro do Norte (Trechos 1, 2 e 3) e a Avenida do Contorno de Barbalha com o propósito de desobstruir a área central destas cidades com a redução do trânsito de cargas pesadas.

94. No que diz respeito à Parte II.3 – “Construção do Centro de Convenções” a UGP, ainda durante a execução do Acordo de Doação nº TF 090852-BR foi realizada a elaboração do Plano de Gestão para o Centro de Convenções do Cariri. O referido equipamento foi construído pelo Governo do Estado por meio da Secretaria de Turismo (SETUR) que também é a responsável pelo gerenciamento. O Centro de Convenções do Cariri foi inaugurado em 15 de maio de 2014 e encontra-se em pleno funcionamento, prestando serviços relevantes para a região.

95. Destarte, considera-se que a execução das atividades do Componente II foi mais direcionada para o Setor de Turismo, especialmente o Geopark Araripe, em detrimento do Setor de Calçados, muito embora o valor dos investimentos neste setor tenham sido superiores àquele em razão do valor da execução da Obra do Centro Multifuncional do Cariri.

1.6. Principais Resultados do Componente de Fortalecimento Institucional e Regional

96. O Componente Gestão Regional e Fortalecimento Institucional envolveu um conjunto de intervenções de fortalecimento institucional, complementares entre si e complementares com as demais ações dos componentes I e II, que visavam fortalecer o processo de gestão compartilhada e descentralizada iniciado pelo Governo do Estado, avançando no sentido de buscar desenhos institucionais melhor definidos e mais adequados para o Projeto.

97. Envolveu projetos e ações nos âmbitos da própria Secretaria das Cidades, dos municípios e das instâncias de representação e gestão regional da Região Metropolitana do Cariri, nas áreas de: capacitação, assistência técnica, aquisição de bens e equipamentos, gestão ambiental regional, estímulo à formação de parcerias, missões técnicas, etc.

98. No que tange o fortalecimento do gerenciamento municipal nas áreas em várias áreas (planejamento; desenvolvimento econômico local; planejamento, avaliação e implementação de projetos; arrecadação de receita; gerenciamento orçamentário e financeiro de serviços públicos; gerenciamento de ambiental e criação de consórcios), conforme preconizado no Acordo de Empréstimo (p. 10), teve-se as seguintes ações:

- Realização de Capacitação para técnicos e gestores da Região Metropolitana do Cariri;
- Realização de Feira de Conhecimento, Capacidades e Soluções: Turismo e Erradicação da Pobreza.
- Aquisição de mobiliários para os municípios;
- Contratação de Consultoria para o desenvolvimento de sites dos municípios de Nova Olinda, Missão Velha e Caririáçu e a atualização dos sites existentes nos municípios de Santana do Cariri, Jardim, Farias Brito, Crato, Juazeiro do Norte e Barbalha.

99. Especificamente sobre a carteira de capacitações do Projeto, esta foi planejada e executada mediante Termo de Cooperação Técnica firmado entre Secretaria das Cidades e Escola de Gestão Pública do Estado do Ceará – EGP, no qual esta ficou responsável pela formatação dos cursos, através da definição dos conteúdos programáticos e elaboração de material didático, bem como a seleção do corpo de instrutores, tendo em vista sua vasta experiência na área.

100. O programa contou com a participação de 478 (quatrocentos e setenta e oito) técnicos e gestores dos órgãos públicos da Região Metropolitana do Cariri, mediante a execução de 15 (quinze) cursos, na modalidade presencial, com carga horária de 16 horas/aula, tendo como principais eixos temáticos: Gestão e Desenvolvimento de Pessoas, Administrativo Financeiro, Controle Interno, Planejamento, Orçamento e Finanças, Modernização Organizacional e Gestão Urbana.

101. Em relação ao fornecimento de assistência técnica à Secretaria das Cidades a fim de dá apoio à implementação, monitoramento e avaliação do Projeto, foram executadas as seguintes ações:

- Aquisição de equipamentos de TI e Comunicação para o fortalecimento institucional da Secretaria das Cidades;
- Contratação de serviço de auditoria externa;
- Contratação de Consultorias nas seguintes áreas: gerenciamento administrativo-financeiro, especialistas na área socioambiental, especialista em resíduos sólidos e serviços de supervisão de obras.

102. Quanto ao fortalecimento das capacidades de gerenciamento à nível regional através do fornecimento de assistência técnica aos empreendedores envolvidos do desenvolvimento regional do Cariri, conforme citado no Acordo de Empréstimo (idem), executou-se as seguintes atividades:

- Realização de Capacitação para o Núcleo de Gestão Sócio Ambiental;
- Contratação de empresa especializada para prestação de serviços de transporte, alimentação e hospedagem para membros de uma Missão Técnica a se realizar nos aterros sanitários de Cianorte (PR) e de Nova Iguaçu (RJ);
- Consultoria para elaboração do Plano de Negócios para orientar a criação e funcionamento do Centro de Inovação Tecnológica do Polo de Calçados e Artefatos do Cariri Central;
- Contratação de consultoria individual especializada em Região Metropolitana.

103. Desta feita, os contratos executados no referido componente foram categorizadas nas modalidades i) Bens e Serviços, ii) Consultorias Firmas e iii) Consultorias Individuais, no qual somaram uma execução de 30 contratos, sendo estes 13 (treze) contratos para aquisição de bens e serviços, 07 (sete) contratos de Consultorias Firmas e 10 (dez) contratos Consultoria Individual, totalizando investimentos no valor de R\$ 18.432.727,19 (dezoito milhões, quatrocentos e trinta e dois mil, dezenove centavos).

104. Contudo, além dos contratos administrativos, o Componente 3 realizou algumas atividades simples sem a formalização de contratos que subsidiaram as ações do Projeto, conforme especificado no apêndice 10, bem como firmou contratos de gestão para pagamento da equipe técnica da UGP.

105. Mediante dados apresentados, infere-se que todas as ações executadas estão em consonância com as ações de planejadas no Manual Operativo do Projeto e no Acordo de Empréstimo, tendo em vista que estas se relacionam com todos os subcomponentes, quais sejam: Subcomponente de Fortalecimento Institucional dos Órgãos Municipais, Subcomponente de Fortalecimento Institucional dos Órgãos Estaduais, Subcomponente Fortalecimento Institucional de Instâncias de Representação e Gestão Regional, Subcomponente de Ações Complementares e Subcomponente de Recursos Não Alocados, nos quais se previam reservas técnicas para serem distribuídas nos demais subcomponentes.

2. AVALIACAO DE DESEMPENHO

106. Para avaliar o desempenho da gestão do Projeto, especificamente o desempenho do mutuário e o desempenho do agente financiador, estabeleceu-se como metodologia a aplicação de formulário eletrônico, sendo este elaborado para coletar a avaliação de desempenho a partir de dois públicos distintos: i) equipe estadual que implementou as ações do projeto (equipe técnica, coordenadores, ex-coordenadores, secretários que atuaram durante a execução da carteira de projetos) e ii) representantes municipais do eixo CRAJUBAR e do Geopark.

107. Os formulários eletrônicos apresentaram questões objetivas e subjetivas referente às fases de preparação e implementação do Projeto, bem como questões sobre a atuação do Banco quanto ao acompanhamento do Projeto. No primeiro grupo, 20 (vinte) pessoas responderam ao questionário e no segundo grupo responderam 03 (três) representantes do eixo CRAJUBAR e Geopark.

2.1. Avaliação do desempenho do Mutuário

108. Para avaliar o desempenho do mutuário, traçou-se alguns critérios avaliativos (elencados a seguir), que foram categorizados em excelente, bom, regular, ruim e péssimo, de forma a demonstrar o nível de desempenho alcançado.

- a. Pertinência das ações desenvolvidas pelos componentes em relação aos objetivos traçados no Projeto;
- b. Cumprimento dos procedimentos estabelecidos no Manual Operativo do Projeto;
- c. Articulação e relação com os municípios beneficiários;
- d. Capacidade técnica e experiência dos profissionais da UGP em relação a programas com financiamento internacional;
- e. Qualidade dos serviços técnicos executados (obras, consultorias e serviços);
- f. Grau de comprometimento da gestão estadual na execução do Projeto.

109. Em relação ao critério pertinência das ações desenvolvidas pelos três componentes em relação aos objetivos geral e específicos traçados no Projeto, entende-se que houve uma boa pertinência das ações, conforme Figura Nº 46, tendo em vista que estas convergiram para o alcance dos resultados finais do Projeto.

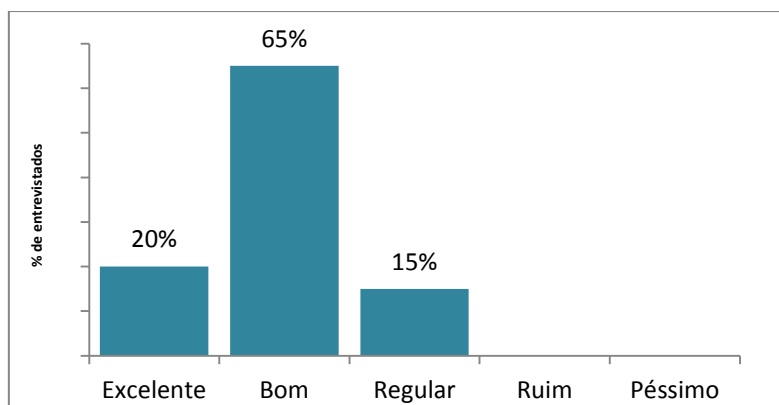


Figura A8.7: Pertinência das ações desenvolvidas

110. No que tange ao critério cumprimento dos procedimentos estabelecidos no Manual Operativo, infere-se, conforme Figura N° 47, que o nível de desempenho foi bom, tendo em vista a utilização e consulta ao referido instrumento para nortear ações e sanar dúvidas. Contudo, o documento careceu de atualizações durante a execução do Projeto, sendo estas realizadas apenas na fase final.

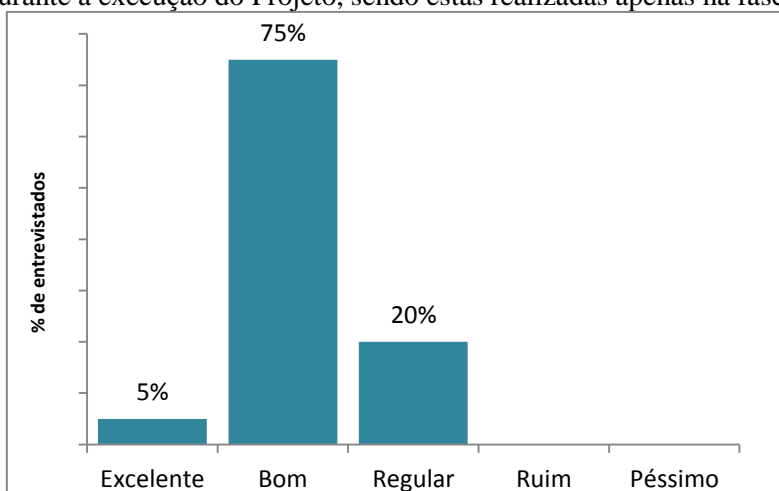


Figura A8.8: Cumprimento dos procedimentos estabelecidos

111. Outro critério avaliativo foi à articulação e a relação entre a UGP e os municípios beneficiados diretamente pelo Projeto. Assim como os quesitos anteriores, o nível do desempenho foi avaliado pela maioria como **bom** (Figura N° 48). Isto se deu pelos vários canais de comunicação estabelecidos entre UGP e municípios, bem como pelo trabalho realizado pela figura do articulador regional e a presença de uma equipe mínima lotada na Região de intervenção.

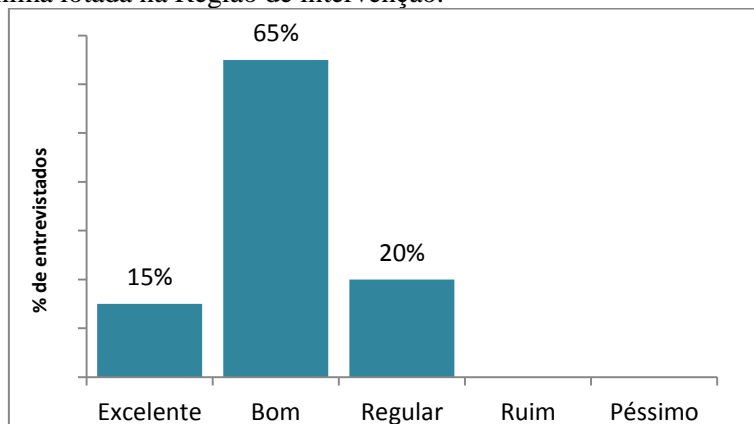


Figura A8.9: Articulação e relação entre UGP e municípios

112. A capacidade técnica e a experiência dos profissionais também se tornaram critério avaliativo de desempenho. O nível deste quesito foi classificado como bom, conforme Figura N° 49. Contudo, por ser um projeto piloto no âmbito da Secretaria das Cidades, sentiu-se a necessidade de realização de várias capacitações periódicas para os técnicos envolvidos, uma vez que houve transitoriedade dos profissionais do Projeto.

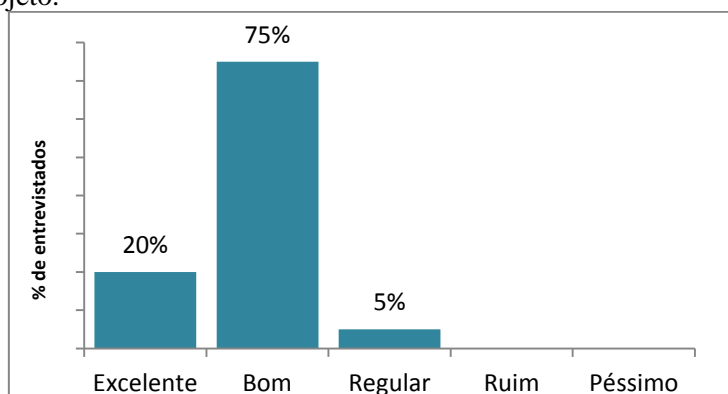


Figura A8.10: Capacidade técnica e experiência dos profissionais da UGP

113. Quanto à qualidade técnica dos serviços executados, o nível alcançado foi bom, sendo esta qualidade resultante da fase de planejamento e elaboração de projetos, que por vezes foi revista para atender as necessidades do público beneficiado, bem como a sistemática de fiscalização dos serviços prestados, no qual contou com uma equipe de supervisão de obras externa, além das cooperações técnicas com demais órgãos do Estado.

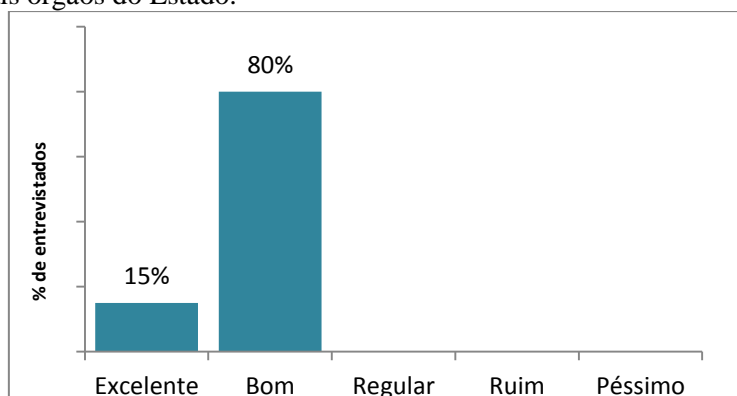


Figura A8.11: Qualidade dos serviços técnicos executados

114. Em relação ao grau de comprometimento da gestão estadual, houve envolvimento direto da gestão superior da Secretaria das Cidades, bem como de outros órgãos do Governo do Estado e da própria Governadoria na implementação das ações e também na resolução de obstáculos. Desta feita, o nível de desempenho deste critério foi classificado como **bom** (Figura N° 51).

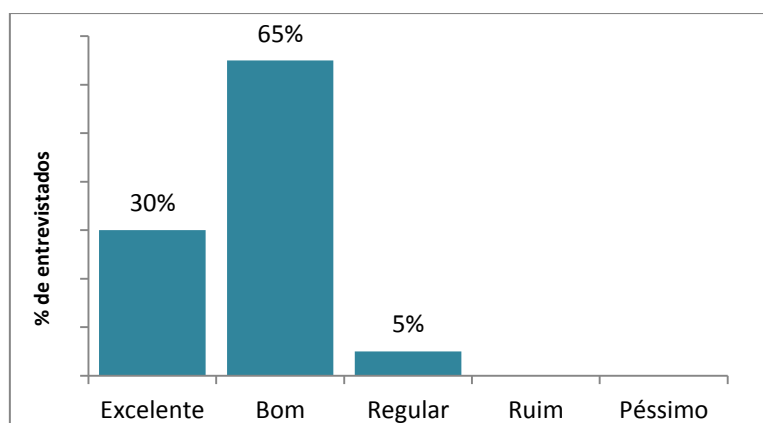


Figura A8.12: Grau de Comprometimento da gestão estadual

115. Mediante os dados apresentados, infere-se que o mutuário teve um bom desempenho na implementação do Projeto Cidades do Ceará – Cariri Central, tendo em vista que houve eficácia na sua atuação, em virtude do cumprimento das ações da carteira do Projeto com nível técnico de qualidade e dentro das normativas estabelecidas no Acordo de Empréstimo, materializadas no Manual Operativo, bem como atuou com uma equipe técnica multidisciplinar, que teve apoio da gestão superior da Secretaria das Cidades e de outras instâncias do Governo do Estado do Ceará, além de contar com a facilidade de comunicação e articulação com os municípios beneficiados diretamente com o Projeto.

116. Enfatiza-se que os erros e acertos durante a execução do projeto são aprendizados, fundamentais para o desenvolvimento de novos projetos pela Secretaria das Cidades, em parceria com o próprio Banco Mundial, ou com outros parceiros internacionais.

2.2. Avaliação do desempenho do Banco

117. Seguindo a metodologia da avaliação de desempenho do mutuário, aplicou-se questionário eletrônico com a equipe estadual que implementou as ações do Projeto com o objetivo de avaliar o desempenho do agente financiador. Os critérios utilizados foram:

- a) Orientação na elaboração do Projeto;
- b) Acompanhamento quanto ao cumprimento dos procedimentos estabelecidos no Manual Operativo do Projeto;
- c) Acompanhamento quanto ao cumprimento das salvaguardas sociais;
- d) Acompanhamento quanto ao cumprimento das salvaguardas ambientais;
- e) Acompanhamento quanto ao cumprimento dos procedimentos estabelecidos nas Diretrizes para aquisições e seleção;
- f) Orientação quanto aos projetos técnicos;
- g) Qualidade das orientações do Banco.

118. No que tange ao critério de orientação na elaboração do Projeto, o nível de desempenho do Banco foi classificado como **bom** (Figura N° 52) tendo em vista a promoção de treinamentos iniciais aos técnicos estaduais e as orientações fornecidas para elaboração da carteira de projetos e estrutura da UGP.

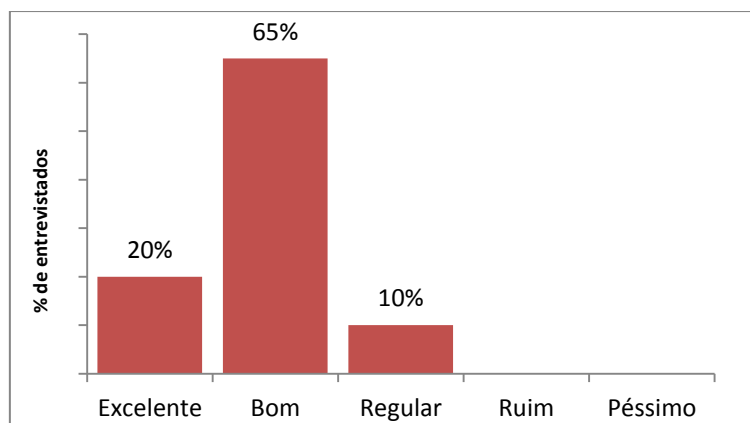


Figura A8.12: Orientação na elaboração do Projeto

119. No que tange o critério relativo ao acompanhamento do cumprimento do Manual Operativo do Projeto, faz-se necessário uma consideração: o Manual Operativo é entendido como uma ferramenta norteadora das ações e procedimentos do Projeto, tendo em vista ser a compilação das condições estabelecidas no Acordo de Empréstimo e as diretrizes do Banco Mundial, por isso seu acompanhamento tornou-se critério avaliativo. Desta feita, quanto ao acompanhamento por parte do Banco em relação ao cumprimento do Manual Operativo pelo mutuário, o nível de desempenho foi classificado como **bom**, conforme Figura N° 53.

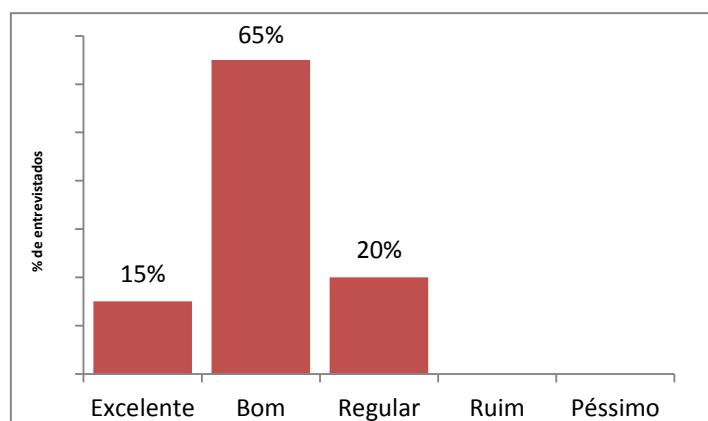


Figura A8.13: Acompanhamento do Manual Operativo do Projeto

120. Em relação acompanhamento efetuado referente aos procedimentos de aquisições de bens e serviços e seleção de empresas e consultorias, classificou-se o nível de desempenho do Banco como **bom**. Isto, motivado pela realização de várias missões técnicas de aquisição, bem como pelos contatos ocorridos ao longo do Projeto pela gerência de aquisição do Projeto e especialista em aquisição do Banco, estreitando entendimentos e facilitando a condução do trabalho.

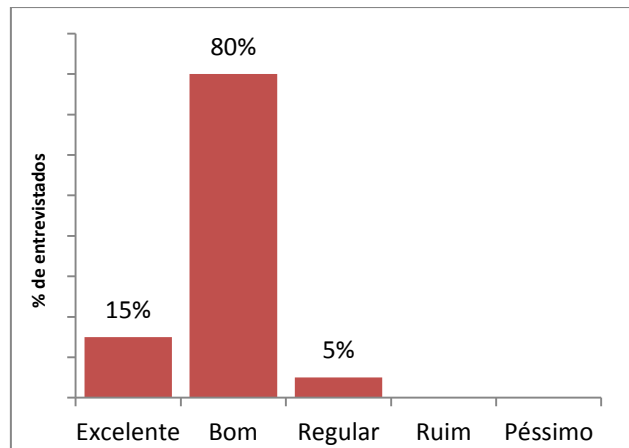


Figura A8.14: Acompanhamento das aquisições e seleção

121. Concernente ao acompanhamento das salvaguardas sociais, o nível de desempenho do Banco também foi classificado como bom. Entende-se que em virtude da temporalidade do Projeto, que perdurou por 07 (sete) anos, as capacitações em salvaguardas poderiam ter acontecido de forma mais periódica, ao longo de todo o processo, havendo a capacitação também dos municípios, tendo em vista que estes, num primeiro momento, foram os responsáveis pela condução dos reassentamentos involuntários.

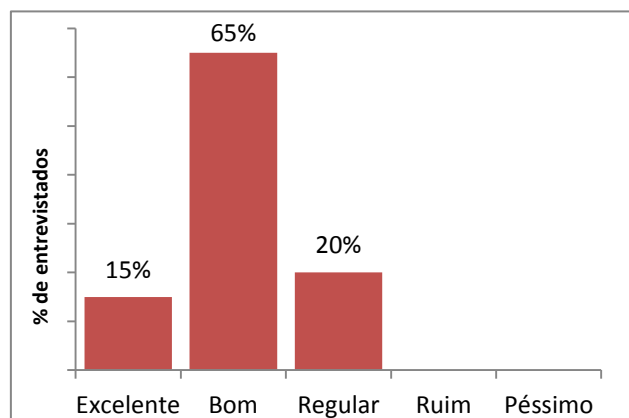


Figura A8.15: Acompanhamento das salvaguardas sociais

122. Em relação ao critério acompanhamento das salvaguardas ambientais, o nível de desempenho foi classificado pela maioria como **bom**. Contudo, há o entendimento que poderia ter havido maior orientação na prevenção de entraves na área ambiental, como capacitações e missões setoriais, o que reduziria os problemas enfrentados pelo Projeto.

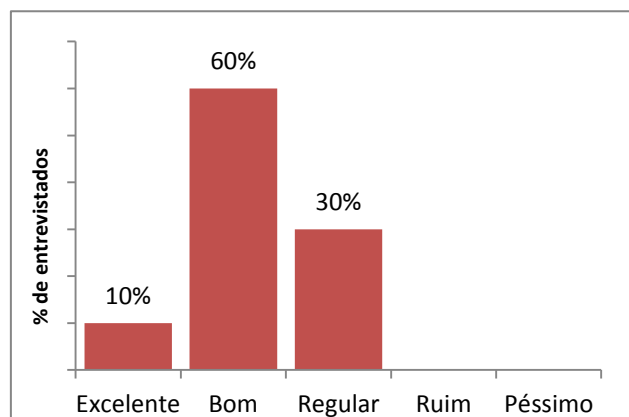


Figura A8.16: Acompanhamento das salvaguardas ambientais

123. O critério avaliação dos projetos técnicos também foi classificado, pela maioria dos entrevistados, com nível **bom**. Contudo, a comunicação/orientação quanto aos problemas de execução ficaram muitas vezes concentrados durante as missões e já durante a execução das obras, não havendo maior avaliação dos projetos e acompanhamento de sua elaboração aliada às missões técnicas setoriais, fato que auxiliaria no melhor monitoramento e, conseqüentemente, diminuição dos problemas de projeto na execução da obra.

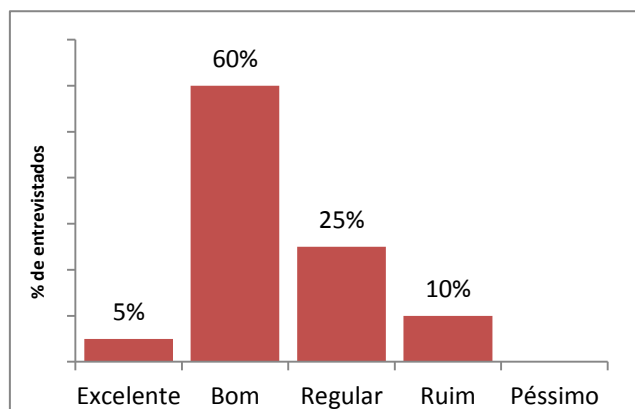


Figura A8.17: Orientação quanto aos projetos técnicos

124. O critério orientação e acompanhamento dos procedimentos financeiros e de desembolso foi avaliado como bom, conforme Figura N° 53. Isto, tendo em vista que o sistema de desembolso aliado ao treinamento da equipe, foi fundamental para a qualidade dos procedimentos.

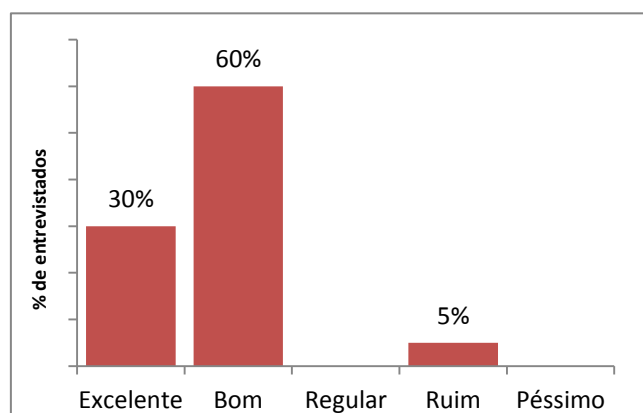


Figura A8.18: Orientação e acompanhamento dos procedimentos financeiros e de desembolso

125. Quanto à qualidade das orientações do Banco, este critério também foi avaliado como **bom**, sendo pertinente salientar que o foco de atenção do agente financiador, conseguiu o modelo de governança adotado pelo Projeto.

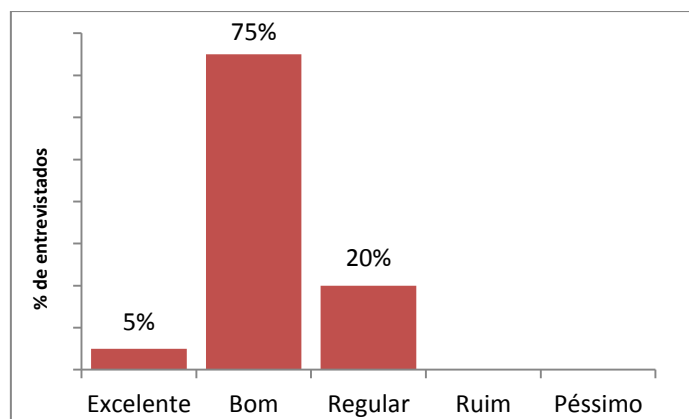


Figura A8.19: Qualidade das orientações do Banco Mundial

126. Isto posto, infere-se que o desempenho do Banco no acompanhamento e orientação na elaboração e implementação do Projeto Cidades do Ceará – Cariri Central foi bom perante a visão do mutuário, tendo em vista o acompanhamento e as orientações fornecidas à equipe técnica da UGP nos vários eixos de atuação do Projeto, contribuindo efetivamente para o alcance dos resultados.

2.3. Avaliação dos municípios sobre a execução do Projeto

127. Objetivando conhecer a percepção dos municípios e do Geopark Araripe no qual foram beneficiados diretamente com as ações do Projeto Cidades do Ceará – Cariri Central elaborou-se questionário eletrônico com questões subjetivas acerca dos principais resultados vislumbrados na Região do Cariri, após a execução do Projeto. (ver apêndice 11)

128. Quando questionados acerca da ampliação e fortalecimento do processo de desenvolvimento socioeconômico e de urbanização da RMC com as ações do Projeto, os entrevistados responderam que as obras foram relevantes e necessárias, mas a Região do Cariri ainda carece de mais investimentos, especificamente, para o fortalecimento do turismo.

129. Afunilando esta mesma questão para o desenvolvimento socioeconômico e de urbanização dos municípios, as respostas obtidas demonstraram que se identificam mudanças neste socioeconômicas e urbanas em consequência da realização do projeto, propiciando uma mudança de comportamento e qualidade de vida da população com a chegada e implantação de obras urbanística, com destaque para Avenida do Contorno de Juazeiro do Norte, já identificada pelos municípios como Anel Viário.

130. Quando questionados acerca da qualidade técnica dos serviços prestados, os entrevistados entendem que foram executados dentro do esperado, exemplificando os trabalhos realizados tanto da área de engenharia como da área social, no qual foram bastante desenvolvidos e debatidos com a população, chegando a um grau de satisfação positiva.

131. Acerca da satisfação quanto a articulação/comunicação entre Município/Geopark e estado, à comunicação dos projetos foi classificada como excelente pelos entrevistados, sendo exemplificado a formação de equipes do estado, prefeitura e BIRD com o foco em viabilizar os projetos e resolver as dificuldades e os impactos para implantação das obras.

132. Questionou-se quais as principais dificuldades enfrentadas pelos municípios, especificamente, para o cumprimento do Termo de Acordo firmado entre estado e município para a implementação do Projeto, sendo respondido que a primeira dificuldade foi financeira, sendo exemplificada a falta de recursos para concretização das desapropriações da Avenida do Contorno pelo município de Juazeiro do Norte, e a segunda foi a percepção dos gestores municipais quanto ao nível de prioridade necessário para efetiva implementação dos Projetos.

133. Questionou-se também as principais contribuições do município para a implementação do Projeto, sendo relatado que no caso específico do município do Crato, em virtude da realização da obra de Recuperação Ambiental e Urbanização do bairro Seminário e da obra de Urbanização das Praças Centrais do Crato, a prefeitura criou uma secretaria (Secretaria da Cidade) para dar suporte técnico e financeiro aos projetos de engenharia e trabalho social no âmbito do município, no qual contribuiu diretamente com as ações do Projeto Cidades do Ceará. No caso Geopark Araripe, toda a equipe esteve à disposição para ajudar.

134. Desta forma, infere-se, conforme fala dos representantes do eixo CRAJUBAR e Geopark Araripe, que o Projeto Cidades do Ceará – Cariri Central influenciou na obtenção de qualidade de vida pela população local, sendo satisfatória a qualidade técnica dos serviços prestados, contudo ainda fazem-se necessários investimentos na área de turismo para potencializar a Região. Sendo concluídos por eles que as parcerias devem ser mantidas, pois os municípios passam por dificuldades que devem ser superadas e os processos de investimentos estaduais não podem parar.

3. LICOES APRENDIDAS

135. Diante da magnitude de um projeto pioneiro como o Projeto Cidades do Ceará que tem por objetivo o desenvolvimento regional, através do (i) Desenvolvimento Econômico, (ii) Melhoria de Infraestruturas, e (iii) Ampliação da Capacidade de Gestão Regional, as experiências extraídas, positivas ou negativas, são de fundamental importância para o crescimento e aprimoramento da equipe executora, que irão facilitar a execução de novos projetos pela Secretaria das Cidades.

136. Desta forma, as lições aprendidas desde a concepção, passando pela implementação e fase de encerramento do Projeto Cidades do Ceará incluem o seguinte:

- O Projeto Cidades do Ceará foi idealizado e estruturado no âmbito da Secretaria de Desenvolvimento Local e Regional (SDLR), esta secretaria foi extinta e a Secretaria das Cidades (SCidades) absorveu suas atividades, inclusive o Projeto Cidades do Ceará. Embora a SCidades trabalhasse com o tema de Desenvolvimento Econômico Local e Regional não faz parte da sua perspectiva a interação direta com setores econômicos, como calçados e turismo, conforme estava previsto nas atividades do Componente II. Isto, obstaculizou a obtenção de alguns resultados do Projeto.
- É importante na fase de concepção do Projeto definir claramente as ações a serem executadas e que as atividades definidas sejam de impacto urbano, social e ambiental (investimentos estruturantes) para alcançar os objetivos do projeto, evitando, desta maneira, a dispersão em diversas ações menores que causam baixo impacto quanto aos resultados.
- O planejamento das obras deve incluir, especialmente, a necessidade de elaboração de plano de gestão dos empreendimentos, que deve ser discutido e concluído antes do início da obra.
- O cronograma de licitação das obras deve ser fundamentado pelo grau de complexidade das obras e de todas as atividades inerentes a estas, tais como desapropriação, reassentamento, etc. As obras de maior porte devem ser iniciadas em até 25% do prazo da vigência do Projeto (o primeiro quarto do Projeto), visando à representatividade do desembolso no decorrer deste, garantindo assim tempo suficiente para a plena execução das referidas ações.
- Garantir a participação dos municípios de forma mais efetiva na fase de elaboração do projeto e na seleção de atividades a serem incluídas no Plano de Aquisições, desta forma pode-se formalizar previamente os termos de compromissos com os municípios para assegurar a contrapartida municipal e as responsabilidades de forma clara entre os entes quando do início de cada obra ou ação.
- É preciso, ainda na fase de concepção, fortalecer a capacidade institucional dos municípios para que eles possam responder melhor aos investimentos realizados.

- É fundamental assegurar a capacitação prévia dos técnicos da UGP nas questões financeiras, contábeis, aquisições e nos aspectos sociais e ambientais no sentido de compatibilizar as exigências do Banco com as regras nacionais. Além disso, deve-se garantir que os técnicos capacitados no início do projeto permaneçam disponíveis até a fase de encerramento.
- Outro fator relevante que pode comprometer a boa execução de um projeto da magnitude do Cidades do Ceará é a alteração constante dos quadros técnicos da UGP, da equipe de gestores da Secretaria das Cidades e da própria equipe de gerenciamento do Banco Mundial.
- Importante a formação de uma equipe técnica mínima que esteja disponível na região desde a concepção do Projeto, com infraestrutura e suporte técnico (escritório, equipamentos, transporte, etc.) para o bom desenvolvimento dos trabalhos.
- Ainda durante o período de concepção devem-se formular indicadores e coletar base de dados que sejam conectados às ações e obras estabelecidas. Ou seja, as atividades a serem realizadas devem ser compatíveis com os indicadores estipulados.
- As Crises econômicas e ajuste fiscal causam impacto nos investimentos no decorrer do projeto, é importante acompanhar as aquisições e desembolsos rigorosamente e estabelecer alternativas no caso do cenário econômico alterar no decorrer da implementação do projeto.
- Os termos de referência de planos e estudos prioritários, bem como os projetos executivos de engenharia devem ser elaborados ainda na fase de preparação do projeto para auxiliar no bom desempenho dos processos licitatórios e evitar contratemplos e atrasos no início da execução das obras e atividades.
- É necessário que o acompanhamento jurídico para temas legais como reassentamento e contratos aconteça desde o momento de elaboração dos projetos executivos das obras, porque estas questões devem ser resolvidas preferencialmente antes do início da execução das obras.
- Ainda sobre reassentamento foi identificada a necessidade de realizar análise prévia da capacidade técnica, institucional e financeira dos municípios para firmar compromissos de realização de reassentamento e desapropriação, bem como sobre a capacidade de manutenção das obras entregues.
- O monitoramento e avaliação devem ser considerados como prioridades durante a implementação do projeto, sendo os indicadores sistematicamente atualizados, com essa dinâmica torna-se mais fácil o acompanhamento das ações. Sendo de fundamental importância, neste quesito, o papel do Banco no sentido de orientar e requerer a realização das atividades de monitoramento.
- É imprescindível a implantação de sistemas de controle e monitoramento de contratos, bem como de pagamentos (financeiro) desde o início do Projeto, esse acompanhamento reduz os riscos de ocorrer problemas na gestão dos contratos.
- O atendimento às questões socioambientais deve ser conduzido de forma independente aos componentes, porém, extremamente alinhadas às ações dos mesmos, para garantir melhor monitoramento no cumprimento das salvaguardas.
- A comunicação com o público interno (UGP, secretarias estaduais, etc.), governos municipais, sociedade civil e as organizações representativas deve ser mantida de forma contínua e consistente visando atender às demandas populacionais que, por ventura, se apresentem no decorrer da execução.
- A multissetorialidade é um fator positivo para o projeto. No entanto, tem-se que ter atenção à capacidade de desenvolver as parcerias necessárias. Deve-se fortalecer aproximação entre os agentes e o trabalho coordenado: (i) com o setor privado; (ii) com a URCA e o Geopark Araripe; (iii) com as prefeituras municipais.

- É sabido que é essencial o planejamento urbano no processo de promoção de cidades economicamente prósperas, culturalmente vibrantes, socialmente equitativas, limpas, verdes e seguras. Com isso, o Projeto Cidades do Ceará - Cariri Central proporcionou um legado positivo para Região do Cariri, através de projetos que impactaram urbanística, social, econômica, cultural e institucionalmente nos municípios que compõem a Região Metropolitana do Cariri.

Annex 9. List of Supporting Documents

1. Project Concept Note (PCN) and Project Information Document (PID)
2. Project Appraisal Document (PAD)
3. Integrated Safeguards Data Sheet (ISDS)
4. Loan Agreement
5. Restructuring Paper (2015)
6. Implementation Supervision Reports (ISR)
7. Supervision Aide Memoires
8. Country Partnership Strategy 2010-2015
9. Satisfaction surveys of: (a) Roteiro da Fé; (B) Crato Plazas; (C) Bypass Road Juazeiro do Norte; (D) *Seminário* District; (E) Barbalha Bypass Road; (F) Historic Center of Barbalha; (G) Highway of Crato – Bela Vista; (H) Farias Brito City Center; and (i) Contour Avenue of Nova Olinda
10. Progress Report for December from January to December 2010
11. Progress Report from January 2011 to August 2015
12. Progress Report of December 2016
13. Measurement of the travel time indicator between specific points of the central region in the City of Juazeiro do Norte
14. Tourism in Ceará: Cariri in Numbers - SETUR Powerpoint
15. Integrated Sustainable Tourism Development Plan (PDTIS): Cariri Central of Ceará - Executive Summary
16. Management Plan of the Multifunctional Center - Final Report
17. Institutional Arrangement to Support and Strengthen the Footwear Cluster in Cariri – Final Report
18. Municipal Profiles of: (a) Santana do Cariri; (b) New Olinda; (c) Missão Velha; (d) Juazeiro do Norte; (e) Jardim; (f) Faria Brito; (g) Crato; (h) Caririaçu; and (i) Barbalha.
19. Report of Activities of Components 1, 2 and 3 - December 2016
20. Report of the Cariri Multifunctional Center
21. Report of the Works of Vila da Música
22. Management Plan for Vila da Música

Annex 10: Pictures from Project Investments

Geopark of Araripe



Tourist Signage: Totens with Information



Tourist Signage: Wooden Entrance



Infrastructure improvements in Geosite of *Pontal de Santa Cruz*



Infrastructure facilities at the Geosite of the Stone Forest (*Floresta Petrificada*)

Urban Infrastructure



Pavement and Urban Rehabilitation in the Historic Center of Barbalha



Bypass around Barbalha



Urbanization in Missão Velha



Access Road (CE-060) in Caririçu



Exit Road (CE-060) in Jardim



Urbanization in the District of Caldas, Barbalha



Sidewalks in the Historic Center of Barbalha



Sidewalk improvements in Crato



Vila da Música



Pavement of the Road between Crato and Bela Vista



Pavement of the Cachoeira Road in Missão Velha



Multifunctional Center in Cariri



Roteiro da Fé in Juazeiro do Norte



Requalification of central plazas in Crato



Requalification of the Central Area of Farias Brito



Urbanization of the Southern Bypass in Nova Olinda



Urbanization of the *Patativa do Assaré* Avenue in Santana do Cariri



Section 1 of the Bypass in Juazeiro do Norte



Urban and Environmental Rehabilitation in Seminário District of Crato



Urban and Environmental Rehabilitation in Seminário District of Crato

Public Consultation and Workshops



International Workshop on the Geopark of Araripe in 2008



International Workshop on the Geopark of Araripe in 2008

GOVERNO DO ESTADO DO CEARÁ
Secretaria das Cidades

SEMINÁRIO REGIONAL DO ESTUDO DE TRÂNSITO E TRANSPORTE DO CRAJUBAR

LOCAL: HOTEL VERDES VALES, EM JUAZEIRO DO NORTE
End.: Av. Plácido Aderaldo Castelo, s/n - Bairro Lagoa Seca

DATA: 25 DE SETEMBRO DE 2008 | HORÁRIO: 8 às 12h

O Governo do Estado do Ceará, através da Secretaria das Cidades, realizará no dia 25 de setembro de 2008, das 8 às 12h, no auditório do Hotel Verdes Vales, em Juazeiro do Norte, o Seminário Regional sobre o Estudo de Trânsito e Transportes do CRAJUBAR, em desenvolvimento pela Associação Técnico-Científica Eng.º Paulo de Frontin - ASTEF. Sua presença é de fundamental importância para a consolidação de soluções para os principais entraves relacionados ao trânsito e transportes na região.

Realização: Governo do Estado do Ceará, Cariri Central, ASTEF

Parceiros: Banco Mundial, AGROPOLOS

Contato: SECRETARIA DAS CIDADES, Centro Administrativo Governador Virgílio Távora, Ed. Sotera, 1º andar - Fortaleza - Ceará, CEP: 04830 - 120 - Fortaleza - Ceará, Fone: (85) 3101 4474, Contato: André Moura, www.cidadaes.ce.gov.br, programacidades@cidadaes.ce.gov.br

Escritório Regional do Cariri
Rua General Antônio Lima, 1131 - Floresta
CEP: 63105 - 900 - Crato - Ceará
Fone: (85) 3102 5791 - Cel: (85) 9822 3901
Contato: Fernando Sampaio

Regional Workshop on Traffic and Transport in CRAJUBAR in 2008



Workshop on Tourism and Economic Development in 2009



Workshop on Tourism and Economic Development in 2009



Public Consultations regarding project financed works in Farias Brito, Plazas in Crato and the *Roteiro da Fé* in Juazeiro do Norte, 2009



Public Consultations regarding project financed works in Farias Brito, Plazas in Crato and the *Roteiro da Fé* in Juazeiro do Norte, 2009

