PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE

Report No.: AB5012

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Bahia Integrated Health and Water Management Project (SWAP)</th>
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</thead>
<tbody>
<tr>
<td>Region</td>
<td>LATIN AMERICA AND CARIBBEAN</td>
</tr>
<tr>
<td>Sector</td>
<td>General water, sanitation and flood protection sector (45%); Health (40%); Sub-national government administration (15%)</td>
</tr>
<tr>
<td>Project ID</td>
<td>P095171</td>
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<tr>
<td>Borrower(s)</td>
<td>GOV. OF BRAZIL, BAHIA STATE</td>
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<tr>
<td>Implementing Agency</td>
<td>SEPLAN (Secretary of Planning)</td>
</tr>
<tr>
<td>Environment Category</td>
<td>[ ] A [X] B [ ] C [ ] FI [ ] TBD (to be determined)</td>
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<tr>
<td>Date PID Prepared</td>
<td>April 28, 2010</td>
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<tr>
<td>Date of Appraisal Authorization</td>
<td>May 6, 2010</td>
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<tr>
<td>Date of Board Approval</td>
<td>August 5, 2010</td>
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</table>

1. Country and Sector Background

Bahia is Brazil’s fifth largest state in terms of land area (564,692 km²), and fourth in terms of population with 14 million inhabitants, or 7.5 percent of total national population. According to the latest census, two-thirds of Bahia’s inhabitants live in urban areas. The Northeast Region is the poorest in the country. Bahia occupies 36 percent of the Region’s territory and more than two-thirds of Bahia land is considered semi-arid.

Bahia’s gross domestic product (GDP) has grown more rapidly than that of Brazil, but growth is uneven across the state. In 2006, Bahia’s annual GDP growth was ranked 6th in Brazil at 4.0 percent; from 2005 to 2009, aggregate growth was 21.6 percent, almost double that of Brazil during the same period. However, most of Bahia’s 417 municipalities are less prosperous, especially in the semi-arid zone where 25 municipalities account for 75 percent of state GDP, and the poorest 132 municipalities combined generate a mere 5.0 percent. Also, 53 percent of state wealth is concentrated in the state capital, Salvador Metropolitan Region.

Despite rapid economic growth, Bahia is still ranked 22nd in Brazil’s Human Development Index (HDI). State GDP growth has not improved the standard of living for most people. Although policies to stimulate economic growth, such as tax breaks for new businesses, contributed to recent economic dynamism, their effect on overall state development has been limited. For example, although the chemical and metallurgical sectors have benefitted from these tax incentives, they create relatively few jobs. Moreover, tax incentives for new businesses mean loss of tax revenues, which has not helped social development.

Bahia’s territorial concentration of production and wealth has generated asymmetrical economic and social development. This is reflected in social indicators: (i) 53.1 percent of state residents live in

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1 Bahia’s GDP was 96.6 billion Reals (local currency), estimated for March 2009. One real is approximately equivalent to 2 US$.
3 Bahia’s economic report 2007.
poverty compared to 45.3 percent nationwide;\(^4\) (ii) 24 percent of people live on less than R$78.00 per month,\(^5\) compared to the national average of 12.3 percent; (iii) the illiteracy rate is 20.4 percent, much higher than the national average of 11.2 percent; (iv) maternal mortality is 106.7 deaths per 100,000 live births, against a national average of 75.9;\(^6\) and (v) only 31.7 percent of rural households have access to a safe water supply, compared to 53 percent nationwide.\(^7\)

**Reducing infant and maternal morbidity and mortality requires multi-sector interventions.** Leveraging synergies between water and healthcare is a more powerful strategy for reducing infant morbidity and mortality. The international community recognizes that supplying adequate water and sanitation (WSS) services is key to preventing diarrheal diseases and reducing post-neonatal mortality; also, to reduce rates of neonatal mortality and advanced dehydration in children due to diarrheal diseases, quality health care services are key. Quality refers to better equipment, timely referrals from primary healthcare (healthcare regulation), better obstetric health care, and training.

**Bahia needs a strategy that combines water and health sector interventions.** This is recognized as the most cost-effective approach to reduce the neonatal and post-neonatal components of the IMR. A longitudinal study in Salvador, Bahia (1997-03) showed an average of 21 percent reduction in diarrheal prevalence among children 0-36 months old, and up to 43 percent in areas of highest prevalence, as a result of implementing a sanitation program.\(^8\) Many regional experiences demonstrated that quality health interventions reduce neonatal mortality rates.

**The State of Bahia still faces significant water sector challenges in tackling infant morbidity and mortality from diarrheal diseases.** The State continues to build institutional capacity for water resources management (WRM) to ensure its rules and organizational structures will protect water quality and allocate it fairly among competing uses. Bahia demonstrated commitment to consolidate the WRM system by passing a new water law and establishing new institutions. Also, the State is expanding its water supply and sanitation (WSS) coverage in rural and urban areas. The State succeeded in meeting “Water for All” program targets by providing water supply to 97 percent of the urban population, and 150 thousand rural families. However, rural area water indicators show that significant challenges remain and the State needs to strengthen policies, coordinate institutional efforts, and increase investment in infrastructure development.

In 2005, only 31.7 percent of rural households were connected to the State water supply network, compared to 94.6 percent of urban households. Not only are the poorest rural people disproportionately affected by lack of access to reliable water resources, but also among Bahia’s rural population only about 5.7 percent of people have access to adequate sewage systems. However, the “Water for All” program (WAP) aims to provide sanitation to some 2.3 million people.

**The Government of Bahia is implementing its ‘Strategic Plan for 2008-2011’ to improve social development equity, quality, and efficiency.** The plan anticipates extending guaranteed access to quality health and expanding social infrastructure (housing, water, sanitation, and energy). Health sector objectives are to reduce maternal and neonatal mortality, and reduce morbidity and mortality due to diarrhea in all Bahia municipalities. The water sector objective is to guarantee an adequate and safe water supply and adequate sanitation through integrated water resources management.

\(^5\) Reference to State’s data 2007.
The State government is committed to managing public policies effectively, and to seeking synergies among sectors. In pursuit of these commitments, the State has requested Bank assistance to finance a multi-sector operation focusing on the health and water sectors and capture their demonstrated synergies to improve health outcomes. In addition, using multi-sector indicators to track the results of government actions is the first step required to implement a comprehensive monitoring system for public policies.

2. Objectives

In the context of the State Government Strategic Plan for 2008-2011, and its key purpose (higher objective) of reducing IMR, the project objectives are to: (i) increase access to clean water, sanitation, and basic health care in at least 10 State priority municipalities most affected by diarrhea, and (ii) improve quality and efficiency of neonatal health care in 25 selected reference hospitals.

The specific Project objectives are the following:

(i) Increase the number of simplified water supply systems constructed and operating in at least 10 selected municipalities most affected by diarrhea.
(ii) Expand basic sanitation to 47,000 beneficiaries in rural areas.
(iii) Strengthen State WRM system through implementing river basin plans and improving State water quality and quantity monitoring systems.
(iv) Increase State coverage of children under one year old with the oral vaccine against human rotavirus to reduce diarrheal infections in the State.
(v) Increase State coverage of the population by family health teams (PSF).
(vi) Increase hospital effectiveness in the selected 25 reference (maternity) hospitals.
(vii) Improve State public policy capacity for planning and monitoring.

3. Rationale for Bank Involvement

Since the late 1980s and late 1990s, Brazil and Bahia have partnered with the World Bank on regional development policies, experiences that can be leveraged in the proposed project. Recently, Bahia has also received direct Bank lending for the health and water sectors, including the Health Sector Reform APL Phase I (Loan 7182-BR), and the Bahia Integrated Water Resources Management Project-PGRH Project (Loan 4232-BR), in addition to benefitting from several Bank-supported federal programs implemented by Brazilian states and municipalities.

The proposed project is closely aligned with the World Bank/Government of Brazil Country Partnership Strategy. This project addresses Bahia’s Strategic Plan for 2008-2011, which has two main development pillars and fourteen strategic directions, outlining concrete programs and actions. One pillar, Equitable Social Development, has two strategic directions—guaranteed access to quality health, and expanded social infrastructure (housing, water, sanitation, and energy). The project is also consistent with the Country Partnership Strategy I – Poverty Reduction and Economic Management, through Component 1, which aims to improve social and economic inclusion of rural and urban communities; and Component 2, which focuses on institutional development of State agencies to improve public management and service provision.

In the health sector, the project supports the State objective of reducing maternal and neonatal mortality rates. The project also significantly improves the Human Development Index (HDI), which was adopted by the State as the main indicator to measure State development in all municipalities. In the

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9 Pan-American Health Organization data shows that water supply and sanitation services contribute to improve health conditions particularly in marginal areas.
10 Neonatal (Children less than 28 days of age)
water sector, the project will support State priorities on the WAP, including universal access to sanitation services and a safe and adequate water supply, which impact both the quality of life and human health, in particular by reducing the IMR (post-neonatal morbidity and mortality). Water sector interventions are in line with national- and state-level water policies.

The State government is also committed to managing public policies effectively, and to this end, seeks synergies among public policies implemented in different sectors. Bahia’s equitable growth depends on promoting development and social inclusion. Therefore the State request for Bank assistance to finance a multi-sector operation focusing on the health and water sectors is based on evidence that synergies between these two critical sectors can reduce IMR, and concomitant interest in monitoring State social development outcomes from a multi-sector perspective. Using sector-based indicators to track successful government actions is the initial step toward establishing comprehensive monitoring systems for all state-level public policies, which is essential to monitor, evaluate, adjust, and implement State government plans and sound policies to alleviate problems using multi-sector operations.

World Bank involvement would ensure that lessons learned in Brazil and other international experiences are incorporated. Experience from two previous projects in the health and water sectors, both evaluated as satisfactory, introduced stakeholders to the fundamentals of health sector reform and water coordination. Other lessons learned are also incorporated, including from the following projects: (i) the multi-sector Acre project, based on inclusion of rural populations through health regulation and health care production lines; (ii) “Plan Nacer” of Argentina to reduce maternal and neonatal mortality; and (iii) the Essential Public Health Programs and Functions, which used outputs for disbursements for the first time in a Bank health project. In addition, the project would apply international standards for monitoring, evaluation, and impact assessment.

4. Description

The proposed Project would have two Components and a total project cost of US$60 million\(^{11}\).

Component 1: Contribute to reducing the IMR (neonatal and post-neonatal) in the State of Bahia. (US$48.0 million). Component 1 will include two sub-components.

Sub Component 1.A: Contribute to reducing State post-neonatal mortality and morbidity due to diarrhea (US$31.8 million), by increasing access to clean water, sanitation and basic healthcare in municipalities most affected by diarrhea. Under Component 1A, health and water sector interventions have been included as “outputs.”

All selected outputs are evidence-based interventions identified for reducing morbidity and mortality caused by diarrhea. An output is defined as a set of cost-effective and specifically selected inputs required for producing evidence-based products, referred to as “intermediate sanitary results.” The project will also utilize the outputs for disbursement of the project funds under component 1A. A list of outputs is described below in Table 4 and in detail in Annex 4. Four health sector and six water sector outputs have been identified as described below:

a) **Health sector outputs** (US$4.0 million) are interventions aimed at reducing incidence and prevalence of diarrhea as well as limiting unnecessary hospitalization in the State.

b) **Water sector outputs** (US$27.8 million) are interventions aimed at supporting the State’s long-term goal of providing sustainable WSS services, through adequate water resources management; and constructing simplified rural water supply systems and sanitation modules.

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\(^{11}\) Including the front end fee of US $ 150,000
Sub – Component 1.B would contribute to reductions in neonatal mortality in 25 selected reference hospitals (US$16.2 million). This subcomponent aims to support municipalities to expand and improve the quality and efficiency of primary, secondary, and tertiary maternal and neonatal health care services (health care chain), by introducing a Quality Neonatal State’s Incentive Insurance System (QUANIIS) in 25 selected State reference hospitals.

The vehicle for financing QUANIIS will be a “Capita,” analogous to a health insurance premium to be transferred from the Borrower to the State, for financing a set of guaranteed and targeted results achieved in the neonatal health care, its supervision, and improvements in the quality and efficiency in 25 selected State hospitals.

“Capitas” will be disbursed by the Bank against the annual number of pregnant adolescents registered in the State insurance program (under 19 years old), representing almost 25 percent of all State pregnancies and are the key risk group selected from all pregnant risk groups in the State. Initially, an estimated 45,800 (annual average) pregnant adolescents registered in the insurance program, which will benefit about 20,000 females in the project’s first year. Estimated capita value for the first year would be US$120. Costs would be re-evaluated after the second year.

Component 2. Technical Assistance for Institutional Modernization of health, water, and planning sectors (US$11.85 million): The Component includes technical support for the water, health, and planning sectors and their institutions to improve management, monitoring and evaluation capacity to implement selected interventions. All agencies involved (see project implementation agreements), will carry out activities to strengthen institutional capacity in areas deemed to require the greatest improvements.

5. Financing

<table>
<thead>
<tr>
<th>Source</th>
<th>($m.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borrower</td>
<td>920</td>
</tr>
<tr>
<td>International Bank for Reconstruction and Development</td>
<td>60</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>980</strong></td>
</tr>
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</table>

6. Implementation

Partnership arrangements

State ownership. The Government of Bahia has extended a formal expression of interest at the highest level in borrowing from the World Bank to support joint actions in the water and health sectors under the coordination of SEPLAN. A Project Preparation Unit, established at SEPLAN has been working with the INGÁ, CERB, and SESAB through a core team of the Bank on the project preparation.

Coordination with other Donors and Arrangements for Project Preparation. In the past few years, Bahia’s most important partner in the health sector has been the World Bank. In the water and sanitation sector, Bahia has been assisted by the Inter-American Development Bank (IDB), through the Bahia Azul Program, and a proposed Águas de Bahia Program. Also, a program to assist small rural communities with water and sanitation construction and institutional development by CERB was partially financed by the German International Financial Agency (KFW), and later by PROÁGUA. Now the State and the World Bank have been coordinating with Pan American Health Organization (PAHO) to increase collaboration with the State and increasing its role in three project areas: (i) health networks, (ii) supervision and technical audits, and (iii) project supervision.
Institutional and implementation arrangements

SEPLAN will be the lead agency responsible for overall coordination and implementation of the proposed project. SEPLAN was the primary liaison for project preparation, and it will count on the sector Secretariats and Institutions - SESAB, INGÁ, CERB to carry out activities under each Component. Except for SEPLAN, no separate project implementation unit is contemplated in any of the implementing agencies. It is anticipated that activities will draw upon existing Government capacity, staff, and systems. However, SEPLAN, SESAB, INGÁ, and CERB may need reorganization and support from new staff or consultants to establish the structure necessary to implement their program, innovations, and activities introduced by the project. Implementing water-related programs under Component 1 would be under the overall coordination of the Bahia State Secretariat for Environmental and Water Resources, via INGA and CERB; SESAB would coordinate the health-related programs. For Component 2, a committee of representatives from all participating sectors will be established and meet regularly to report progress and address outstanding actions, supervised by SEPLAN.

7. Sustainability

Bahia’s first SWAp project was endorsed fully by the Governor and participating sector secretariats. A core element of State development strategy is to raise the quality of life of Bahia’s poorest residents, in particular people from the 30 municipalities. This focus is complemented by support for most participant municipalities working in Bahia, and consulted during project preparation, and by participating providers and the federal government that approved the “Carta consulta.”

The proposed project complements State economic strategy. Expanding basic water and health services to communities living in the priority municipalities supported under the project, including indigenous groups is central to the State economic program. The project would contribute to sustainable development through natural resource management, environmental rehabilitation, and capacity building. Also, the Government of Bahia will be better positioned to carry out its Strategic Plan for 2008-2011, which seeks to improve social development equity, quality, and efficiency, particularly in healthcare and water/sanitation services. The Strategic Plan also includes guaranteed access to quality healthcare and expanded social infrastructure in housing, water, sanitation, and energy. Government will accomplish its healthcare objectives to reduce maternal and neonatal mortality, and morbidity and mortality due to diarrhea in all Bahia’s municipalities; and its water sector objectives though guaranteed access to an adequate and safe water supply, and adequate sanitation and treatment through integrated water resources management.

8. Lessons Learned from Past Operations in the Country/Sector

Program design reflects lessons learned from several sources: (a) Brazil PSF impact evaluations; (b) SWAp implementation and operational assessments; (c) international experience implementing public health insurance to reduce maternal and neonatal mortality; and (d) World Bank work in health operations and evaluations at the State level.

Table 4: Lessons learned and reflected in project design Project

<table>
<thead>
<tr>
<th>Project</th>
<th>Lessons Learned</th>
</tr>
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<tbody>
<tr>
<td>Family Health (I and II) Project</td>
<td>PSF can improve basic health care coverage, quality, and</td>
</tr>
</tbody>
</table>

12 A full assessment was made for this project.
World Bank overall experience supporting Argentina’s health sector over the past decade has shown that Bank financing should be closely linked to outputs and outcomes; incentives should be fully incorporated in design; and results should be measured.

<table>
<thead>
<tr>
<th>Argentina’s “Provincial Maternal-Child Health Investment Project (Plan Nacer)” and the “Essential Public Health Programs and Functions Project”</th>
<th>outcomes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahia Health Sector Reform APL I</td>
<td>Given the dynamic nature of the Brazilian health system, it is important to allow for flexibility within an agreed framework that emphasizes results.</td>
</tr>
<tr>
<td>Bahia Water Resources Management Project</td>
<td>Water reforms affect everyone. Projects in the water sector require considerable time and effort to build consensus, and political support at the highest levels. Consensus-building is time consuming, demanding, and requires considerable investment in a communication strategy that includes public information and consultation processes.</td>
</tr>
<tr>
<td>Brazil’s REFORSUS</td>
<td>Limit spending on hardware investments while promoting “software” investments (e.g., managerial and organizational change).</td>
</tr>
<tr>
<td>Pernambuco Education and Public Sector Management Improvement Project (PE SWAp)</td>
<td>Focused Public Sector Reforms. Projects should focus: on core government functions such as financial management; agencies such as a tax agency; or a single problem such as infant mortality, but approached from different sectors. Such projects require a carefully sequenced, incremental approach over a significant number of years (10 or more) beyond a typical project life cycle.</td>
</tr>
<tr>
<td>Ceara Inclusive Growth (SWAp I)</td>
<td>Use of indicators in a SWAp. Selecting measurable, precise, and reasonable indicators is crucial for program success. Problems arise when indicators (i) are based on the cumulative actions of several entities over which the State has insufficient leverage through funding, and (ii) are at the mercy of subjective opinion as to whether performance is deemed “satisfactory.”</td>
</tr>
<tr>
<td>ACRE Multi-sector Project</td>
<td>(i) Avoid “sectors approach” to solving State problems, and (ii) focus on “territorial vision,” not general State-wide interventions.</td>
</tr>
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</table>

9. Safeguard Policies (including public consultation)

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Environmental Assessment (OP/BP 4.01)</td>
<td>[X]</td>
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<tr>
<td>Natural Habitats (OP/BP 4.04)</td>
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<td>Pest Management (OP 4.09)</td>
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<td>Physical Cultural Resources (OP/BP 4.11)</td>
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<td>Involuntary Resettlement (OP/BP 4.12)</td>
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<td>Indigenous Peoples (OP/BP 4.10)</td>
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<td>Forests (OP/BP 4.36)</td>
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<td>[X]</td>
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<tr>
<td>Safety of Dams (OP/BP 4.37)</td>
<td>[]</td>
<td>[X]</td>
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</table>
Projects in Disputed Areas (OP/BP 7.60) 13  
Projects on International Waterways (OP/BP 7.50)  

10. List of Factual Technical Documents

**Health**

Bahia’s economic report 2007

Attacking Brazil’s Poverty, World Bank 2001, and State’s data 200

WHO: Center for classification of diseases (2006)


DCPP-World Bank. 2006. Water Supply, Sanitation, and Hygiene Promotion. Ch. 41 from the Disease Control Priorities in Developing Countries.


Sampaio Rondin Luis Fernando. The primary Health Care Strategy in Brazil. (power point presentation) November 2006.


13 *By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties’ claims on the disputed areas*.


Water

Bahia, Plano Estadual de Irrigacao, Secretaria de Agricultura, Irriga, caoe Reforma Agriria, Governo da Bahia

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Plano de Monitoramento Hidrometeorológico de Bacias Hidrograficas, SRH, Bahia, 1996

Programa de Qualidade das Aguas da Barragem Pedra do Cavalo e da Bacia do Rio Subae,

TUCANO, Custos Globais, SRH, Bahia

Gerenciamento dos Recursos Hidricos e Desenvolvimento Sustentavel no Semi-Arido Baiano, COFIEX, Carta Consulta

Projeto de Gerenciamento de Recursos Hidricos do Estado da Bahia, Fase Identificacao, Vol 1, Tomo 1, Geohidro, 1995

Projeto de Gest&o de Recursos Hidricos da Bahia, Avaliacao dos Aspectos Institucionais Visando a Implementacao do Projeto, SRH, Bahia, 1996


A Review of World bank Experience in Irrigation, Report No. 13676, 1994

Brazil. Management of Water Resources, LAC Economic Notes, 1995

Acta de la Primera Reunion Nacional Sobre Evaluación de Impacto Ambiental, CONAMA
Modernization Program for the Laboratory of Hidrometeorology of the State of Bahia, Paulo Nobre, June 1996


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