

IMF Joint Caribbean Growth Conference



NASSAU, BAHAMAS



✓ Growing interest of governments

✓ Countries with PPP legal frameworks, and operational PPP units
strong project pipeline

✓ In other countries:

few projects

✓ Pipeline of potential projects

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Successful PPP Projects

Ongoing PPP Projects

Two Critical factors to enable and foster PPPs in the challenging Caribbean environment

- Time to actively support identified projects (Jamaica, Grenada, Trinidad and Tobago, others) → demonstration effect**



Development Bank of Jamaica / Government of Jamaica



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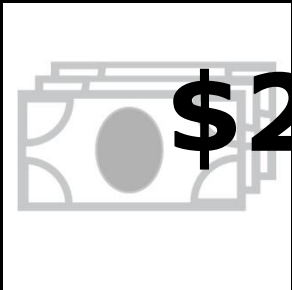
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» **Projects: Norman Manley International Airport, Soapberry Waste Water Treatment Plant**

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This series provides an overview of successful public-private partnerships in various infrastructure sectors, where IFC was the lead advisor.

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Jamaica: Air Jamaica

Regional air travel is a critical issue facing the Caribbean's small, fragmented countries and markets. IFC was lead advisor to the government of Jamaica in structuring the privatization of Air Jamaica, which culminated in an agreement between Jamaica's government and Caribbean Airlines, the national airline of Trinidad and Tobago. Approximately 900,000 passengers annually will benefit from the new service, which eliminates the government's subsidy of the airline's operations. The agreement was signed on April 30, 2010.

The privatization will transfer full financial responsibility of Air Jamaica to Caribbean Airlines, without including Air Jamaica's past liabilities. Under the terms of the agreement, the government of Trinidad and Tobago will invest \$50 million in Caribbean Airlines' equity capital in order to fund its Jamaican operations, ensuring sustainable development while improving air service to and from the country.

The project was supported by the Canadian International Development Agency, the U.S. Treasury, and the U.S. Trade and Development Agency.

BACKGROUND

The Jamaican economy is heavily dependent on services, which account for more than 60 percent of GDP. The country derives most of its foreign revenues from tourism, so air service is critical to the economy and the country's future. However, Air Jamaica – the national airline – operated in an intensely competitive environment dominated by large, privately owned airlines. Air Jamaica experienced losses in 40 out of its 42 years of existence; as of March 2010, Air Jamaica's financial statements showed an accumulated deficit of approximately \$1.54 billion.

The Jamaican government determined that there was no economic rationale for its continued involvement in Air Jamaica and that this expense was unsustainable. It sought to remove Air Jamaica from the national budget so that those resources could be released to support critical infrastructure projects and social services. The government needed to ensure the long-term, sustainable development of Air Jamaica through a partnership – in this case, between the government and an investor with technical expertise and financial strength.

IFC'S ROLE

As lead transaction advisor to the government of Jamaica, IFC's specific roles included:

- Preliminary market testing and resource mobilization.
- Diagnostic and transaction structuring.
- Transaction implementation.
- Leadership in the design and implementation of a pre-privatization restructuring plan.

Ultimately, IFC contributed to Jamaica's financial stability, a priority of the new political administration, while participating in the restructuring of the Caribbean airline sector, a regional infrastructure priority.

TRANSACTION STRUCTURE

Under the terms of the agreement, the government of Trinidad and Tobago will invest \$50 million in Caribbean Airlines to fund its new Jamaican operations. The Jamaican government will receive a 16 percent minority interest in Caribbean Airlines in compensation for the transfer of Air Jamaica's market share and goodwill to Caribbean Airlines. The government of Jamaica will retain ownership of Air Jamaica's real estate and industrial assets.

The transition went into effect on May 1, 2010, and Air Jamaica continued its operation under a contractual arrangement with Caribbean Airlines. There was no disruption of service; tickets previously issued to passengers were honored. The financial transition also went into effect at this time, and Caribbean Airlines assumed full financial responsibility for Air Jamaica. Air Jamaica employees were made redundant, though Caribbean Airlines planned to re-hire approximately 1,000 of them during the transition period. These employees had been identified and approached earlier in the process.

BIDDING

In March 2008, the government established a transparent and non-discriminatory bidding process so that any suitably qualified investors

could participate. Potential investors were asked to demonstrate their technical expertise and financial strength by submitting proposals highlighting their qualifications and plan for the future of the airline. Registered prospective investors were required to adhere to a clear timetable.

IFC assisted the government in assessing adherence to the requirements and guidelines by each interested party. Seven companies submitted expressions of interest, five of which fulfilled the requirement to provide information on their financial strength and aviation expertise. IFC and the government of Jamaica concluded that four of the five companies met the technical and financial criteria. Ultimately two of them – Indigo Partners and Caribbean Airlines – submitted proposals before the deadline of June 30, 2009.

IFC and the government of Jamaica then evaluated the strengths of each proposal, following a pre-determined evaluation approach (a weighted scoring system). Proposals from Indigo Partners and Caribbean Airlines were both strong, but Indigo Partners' proposal scored marginally higher. The recommendation of Indigo Partners was accepted by the government and negotiations began in July 2009 on an exclusive basis.

However, four months later the negotiating parties acknowledged their lack of progress in reaching a final agreement. Discussions with Indigo were terminated by mutual consent. The government of Jamaica resumed negotiations with Caribbean Airlines. Negotiations between the government and Caribbean Airlines were successfully completed in April 2010.

POST-TENDER RESULTS

- The privatization of Air Jamaica will help stabilize Jamaica's public finances by eliminating the government's subsidy of the airline's operations.
- Approximately 900,000 passengers annually will benefit from the new service. Long-term, the privatization of Air Jamaica will ensure sustainable airline services to Jamaica.
- The establishment of a reliable and financially successful airline will support continued economic growth in Jamaica, a country with an unstable economic history and relatively limited foreign investments.
- As Jamaica overcomes its economic challenges, the government lays the foundation for a more sustainable future for the Jamaican people.

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Haiti: Teleco

On April 29, 2010, the Central Bank of Haiti (Banque de la République d'Haïti or BRH) signed an agreement with Vietnam's largest mobile telephone operator, Viettel, to significantly expand telecommunications services in the earthquake-ravaged country. The public-private partnership is expected to modernize Teleco, help improve the company's technical and financial capacities, modernize its infrastructure, and provide new services to its customers.

Viettel will invest US\$99 million under a public-private-partnership that will fold Teleco, the existing state-owned telecom enterprise, into a new telecommunications company. The investment will increase access to fixed and mobile telephone services and develop the country's first nationwide fiber optic network. The agreement represents Haiti's largest foreign direct investment following the massive earthquake that struck the country earlier this year.

DevCo, a multi-donor program affiliated with the Private Infrastructure Development Group and supported by the UK's Department for International Development, the Dutch Ministry of Foreign Affairs, the Swedish International Development Agency and the Austrian Development Agency, provided support for the advisory work. Additional support for IFC's advisory work was provided by the US Treasury Department.



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BACKGROUND

Even before the devastating January 2010 earthquake, Haiti's telecommunications infrastructure was woefully inadequate. Fixed line penetration was only 1.2 percent, the lowest in Latin America and the Caribbean. Mobile density was about 35 percent, while Internet penetration was below 1 percent. With the liberalization of the telecom mobile market in 2000, Teleco—the state owned fixed telephony enterprise that had enjoyed a monopoly in the telecom sector—saw its market share reduced to 4 percent of the overall telephony market or less than 120,000 lines compared to 3.5 million mobile subscribers in 2009. In addition, the company suffered from a deteriorating telephony network. BRH has been required to cover Teleco's recorded financial losses in recent years.

In 2007, BRH and the Government announced their intention to modernize Teleco through a public-private partnership (PPP) that would transfer majority ownership and management control to a reputable telecommunications investor. The strategy of opening Teleco's capital to a strategic partner would help improve the company's technical and financial capacities, modernize its infrastructure, and provide new services to its customers. More broadly, the modernization project aimed at achieving significant development impacts over five-years, including:

- Intensified competition in the telecom market (in 2009, a single company had over 60 percent of the market share).
- Increased penetration and higher quality mobile telephony services, particularly for low income customers and rural subscribers.
- Increased Internet penetration.
- Significant investments in critical telecom infrastructure—such as nationwide fiber optic backbone and access to a second fiber optic submarine cable—which were expected to boost the development of IT-services in the country.

With a population of nearly 10 million, Haiti had the potential to become the second largest telecom market in the Caribbean.

The earthquake that struck Haiti in the midst of the negotiations caused significant damage to the existing telecom operators' networks, including those of Teleco. Rebuilding infrastructure and increasing access to fixed, mobile, and high speed internet services became a key component of the country's long-term recovery strategy.

IFC'S ROLE

IFC served as the advisor to BRH on structuring and implementing the international bidding process for the telecom PPP. IFC worked closely with Haiti's Council for the Modernization of State-Owned Enterprises, which acted as the project's implementation agency on behalf of BRH to ensure the highest standards of transparency and fairness. IFC also coordinated with the World Bank, which was conducting a reform project to improve the regulatory environment for telecom operators in the country.

TRANSACTION STRUCTURE

The PPP established a new telecom company that possessed licenses and frequencies for a full range of telecom services, including wire line, fixed-wireless, international submarine cable, WiMax-based wireless broadband, and cellular. The winning bidder would hold a 60 percent stake in the new company; BRH, Teleco, and their affiliates would control the remaining 40 percent.

BIDDING

Viettel won the international tender among three bidders to upgrade Haiti's fixed line network and build the country's first fiber optic cable network. Viettel will initially invest US\$59 million, and then an additional US\$40 million over four years.

The construction of the fiber optic cable network will provide Internet access to remote towns, while the opening of a second additional access point to submarine fiber optic cables will improve the country's global connectivity.

EXPECTED POST-TENDER RESULTS

- The winning bidder, Viettel, will invest US\$99 million to upgrade telecommunications services. This is Haiti's largest foreign direct investment following the massive earthquake of January 2010.
- Rebuilding telecom infrastructure and increasing access to fixed, mobile, and high speed Internet services are key components of Haiti's long-term earthquake recovery strategy. For instance, the new company's mobile network is expected to increase mobile penetration by 1.5 million subscribers in five years.
- Construction of the country's first fiber optic cable network—a >3,000 km network as described in Viettel's business plan—will provide Internet access to remote towns; opening a second access point to submarine fiber optic cables will improve global connectivity.
- The project, Haiti's third PPP, is expected to catalyze future foreign direct investments as well as new PPPs in critical power, transportation, and water sectors. This catalytic role is especially important given the challenging post-earthquake reconstruction needs in Haiti.



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Panama: Panama Pacifico SEZ

The Panama Pacifico project is transforming the former Howard U.S. Air Force base outside Panama City into a hub for international trade, logistics, services, commerce, and industry. As principal advisor to the government, IFC recommended that a private investor develop the 2,500 hectare site through the establishment of a special economic zone (SEZ) with a modern regulatory framework and administration conducive to business and direct foreign investment. The land received SEZ status in 2005 and within two years a private master developer was selected and a master development agreement signed.

One of the largest development projects in the world, Panama Pacifico capitalizes on its strategic location at the entrance to the Panama Canal and its close proximity to Panama City, the capital. London & Regional Properties (L&R), a global private real estate development firm, won the bid for the 40-year concession. L&R committed to invest a minimum of US\$408 million over the first eight years of the project, of which US\$20 million was paid up front, and a minimum of \$100 million for each eight-year period afterward. Panama Pacifico is expected to attract US\$3 billion in direct foreign investment and create an estimated 20,000 new jobs.

BACKGROUND

In accordance with the 1977 Torrijos-Carter Treaty, the Howard U.S. Air Force base and its infrastructure reverted to the government of Panama in 1999. The government sought to use the assets, especially the runway, to bring economic activity to the country and create jobs. After a number of unsuccessful attempts to achieve these objectives, the government retained IFC in June 2001 to advise on structuring the project as a public-private partnership aimed at generating sustainable employment opportunities, strengthening and diversifying Panama's economic base, increasing the country's competitiveness, and improving the investment climate.

IFC'S ROLE

When IFC signed the mandate for the Panama Pacifico public-private partnership, the government was intent on turning the former military base into an airport and port. IFC brought a more expansive vision to the project and helped the government recognize the site's full development potential.

IFC's mandate included developing the project concept; designing a coherent development strategy; drafting laws creating a special economic zone based on international best practices and associated regulations; developing a land use master plan, baseline environmental and demand studies, and a financial model to define the land price; designing an innovative master development agreement; and managing an international selection process. During the six years of the mandate's tenure, IFC worked with the government authorities, class associations, opinion makers, and political leaders to prepare the project and help ensure congressional approval.

A major national public relations campaign helped build consensus among the diverse stakeholders and gave the project credibility. This in turn helped ensure approval of the law creating the Agency for the Panama Pacifico Special Economic Zone, a dedicated agency structured to facilitate one-stop shopping. IFC played a lead role in promoting the project to potential international bidders, ensuring a transparent and competitive process, selecting the master developer, and advising on the contract structure.

TRANSACTION STRUCTURE

The Panama Pacifico project is intended to transform a former U.S. Air Force base into a special economic zone for international trade, commerce, and industry and to develop the site as a commercial, residential, logistics and business hub. Plans call for the construction of more than one million square meters of commercial space as well as an urban center with 20,000 houses and apartments, hotels, shopping centers, and restaurants surrounded by gardens, green belts, parks, and water resources. The former military airstrip is being used as an alternate airport to Tocumen International Airport (and therefore financed by Tocumen Airport users). Today the former military airstrip

primarily serves the Singapore Technologies (ST) Maintenance-Repair-Overhauling facilities. ST took over the four hangars and currently employs about 300 technicians who have been trained at the facility. Plans for additional facilities are underway.

IFC proposed a highly innovative and complex transaction structure for the 40-year concession. The master development agreement allocated the parties' obligations and risks. The agreement also defined the pricing of land (fixed base price and contingent price, determined by a transaction value or deemed sale), the minimum land takedowns by category of use, the rules for land development to prevent land speculation, the penalties for non compliance (e.g. government buyback options), and the government's onsite infrastructure development obligations, among others. Under the terms of the agreement, the master developer is granted exclusive development rights for 15 years and limited rights for the rest of the concession.

BIDDING

L&R won the bid for the 40-year concession. The winning proposal included commitments to invest a minimum of \$408 million over the first eight years of the project, of which US\$20 million was paid up front, and a minimum of \$100 million for each eight year period afterward.

EXPECTED POST-TENDER RESULTS

- US\$20 million up front payment to the Government.
- Developer will invest a minimum US\$408 million in the first eight years of the project, and US\$100 million in each eight-year period afterward.
- Project is expected to attract US\$3 billion in direct foreign investment.
- More than 20,000 jobs will be created over the life of the concession.
- Abandoned military base has been transformed into a hub for international trade, commerce, and industry, and developed as a commercial, residential, logistics and service center.
- Special economic zone based on international best practices is already attracting global corporations, such as Dell and Singapore Airlines.
- The U.S. Green Building Council and the Clinton Climate Initiative have named Panama Pacifico as one of 16 founding projects that demonstrate "climate positive" urban growth strategies.



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Roads



Colombia: Ruta del Sol

Good highway infrastructure is essential to economic development. The Colombian government backed this concept in July 2010 when it awarded the concession of the third and final section for the construction and expansion of the \$2.6 billion Ruta del Sol highway. This 1,000-kilometer road connects the capital, Bogotá, with other large urban areas of the country's interior and Caribbean coast. When completed, Ruta del Sol will help foster the country's competitiveness in these sectors and improve road and travel conditions for passengers and goods.

Ruta del Sol was initially conceived by the government as a single project. It was later divided into three concessions to adapt to market conditions, to ease its construction and financing, and to mitigate single-operator risk. The winner of Sector 1 will be responsible for building a new 78-kilometer double carriageway road in mountainous terrain and for maintaining it for seven years. The winners of Sectors 2 and 3 will undertake the rehabilitation, expansion to double carriageway, maintenance and operation of 528 and 465 kilometers of existing roads, respectively, for up to 25 years. The project received Project Finance International's Transport Deal of the Year award for the Americas for 2011.

The Public-Private Advisory Infrastructure Facility (PPIAF) and the IFC-U.S. Department of the Treasury Trust Fund provided funding for the project.

BACKGROUND

Like other countries in Latin America, in the last 20 years Colombia has been expanding its road network through different concession models. As a result, a number of projects have been awarded under a broad range of contractual structures. Over the years, however, many of these projects suffered construction and maintenance delays, leading to contract renegotiations and in some cases early termination. In addition, these projects attracted very limited participation from international investors and local pension funds. This situation led Colombia's National Concessions Institute (INCO) to seek assistance from IFC.

Extending more than 1,000 kilometers, Ruta del Sol was one of the most important missing pieces of Colombia's concession program. Following a failed attempt to concession it in the early 1990s, in 2007 Colombia's Ministries of Transport, Finance and Planning jointly requested IFC assistance to structure a new concession for the project and help prepare a bidding and contractual structure that could become a model for future road concessions.

IFC'S ROLE

IFC was the transaction advisor to INCO for the structuring of the three concessions which were tendered in two bidding processes. IFC's involvement included selecting and leading a group of consultants who helped carry out the project's due diligence and prepared detailed studies for structuring and market information purposes.

IFC's role also included preparing the project's financial model and evaluating different structuring alternatives. These analyses also determined the level of support required to develop a public-private partnership, to help the government make an informed decision on its subsidy contribution.

TRANSACTION STRUCTURE

The project was structured in three parts:

Sector 1: A 78-kilometer double lane greenfield project. The due diligence phase included a deep engineering analysis and an assessment of potential alignments. Given its risk profile, Section 1 was structured as a medium-term concession of seven years with availability payments (five years for construction and two years for operation). The intention is to retender it as a toll road concession at a future date.

Sector 2: This project covers 528 kilometers in flat terrain and revenues include toll collections and government availability payments. This was structured as variable-term concession, so the concession will expire once the concessionaire's requested Net Present Value (NPV) of revenues is reached (maximum term is 25 years).

Sector 3: This project covers 465 kilometers of semi-flat terrain and revenues include toll collections and government availability payments. This was also structured as variable-term concession

limited to a maximum term of 25 years.

Government subsidies for all sectors consisted of yearly, project-specific budgetary allocations assigned by the Ministry of Finance to each concession. These allocations will be transferred every year to individual concession trusts and funds would be payable to the concessionaires upon completion of contractually-defined construction milestones. Deductions could be applied to the payments if the concessionaire does not meet minimum road condition and operational performance parameters. This plan creates an incentive for compliance with construction and operation and maintenance goals.

The bidding criteria for all three sectors consisted of a combination of technical and economic variables with the greatest value assigned to the economic proposal. The economic variable was the lowest NPV of revenues.

BIDDING

Sector 1 was awarded to Consorcio Vial Helios, a consortium led by Colombia's Grupo Solarte and ConConcreto S.A. together with Argentina's Iecsa S.A. The government contribution requested was \$770 million, 20 percent less than the maximum-approved government contribution to this concession.

Sector 2 was awarded to Concesionaria Ruta del Sol SAS, a consortium led by Brazil's Constructora Norberto Odebrecht and the Colombian financial group Corficolombiana. NPV of revenues requested totaled \$1.047 billion, which represented 6.5 percent less than the maximum-allowed bid value.

Sector 3 was awarded to Yuma Concesionaria S.A. PSF, a consortium led by Italy's Impregilo, which included Colombia's Bancolombia and the pension fund Protección. NPV of revenues requested totaled \$1.039 billion for Sector 3, which was 9.5 percent less than the maximum-allowed bid value.

EXPECTED POST-TENDER RESULTS

- Ruta del Sol will reduce travel time, costs, and accidents along Colombia's main road.
- It will link agricultural, industrial, and urban centers with Caribbean ports, fostering the country's competitiveness.
- Ruta del Sol will provide better access and improved services for 10.5 million vehicles.
- Ruta del Sol is a model for future road and other infrastructure concessions in Colombia.

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Lesotho: National Referral Hospital

Lesotho is replacing its main public hospital with a new 425-bed facility that is supported by a network of refurbished urban clinics. All the facilities will be designed, built, financed, and operated under a public private partnership (PPP) arrangement that will also include clinical services. The new hospital will deliver greatly improved, high-quality, publicly funded health care services and will serve as the main clinical training facility for all health professionals. The PPP project structure is a first for the health sector in Africa.

The Tsepong consortium, headed by Netcare and comprising significant local ownership, won the bid for the project. Tsepong will design, construct, partially finance, and operate the new hospital and three urban clinics under an 18-year PPP agreement. The project will cost approximately US\$100 million and will be financed through a combination of commercial financing by the Development Bank of Southern Africa, a government contribution, and private equity.

The project was supported by technical assistance funds from the governments of the Netherlands and Sweden and has been awarded a grant of US\$6.25 million from the Global Partnership for Output Based Aid that will be used for the initial delivery of services at the new facilities

BACKGROUND

Lesotho is a small, mountainous country of 2 million people in southern Africa. Its revenues come primarily from water exports to South Africa, agriculture, and garment manufacture. The country faces serious challenges in the health sector. The nation's main hospital, Queen Elizabeth II, is an aging facility that is functioning at a minimal level and urgently needs to be replaced. It is also consuming increasing government resources while services continue to decline.

Furthermore, Lesotho faces a shortage of trained health care professionals. The new hospital will help the country retain and attract doctors and nurses by providing improved working conditions and professional development programs.

IFC'S ROLE

IFC advised the government on the feasibility, structuring, tendering, and implementation of the PPP. It worked closely with the government to bolster its understanding of PPPs, build its implementation capacity, and help it garner political support.

The IFC team undertook extensive due diligence and project feasibility work, and marketed the project locally, regionally, and internationally. IFC also commissioned a baseline study that documented the existing poor services and facilities, providing important data that allowed the government to make some simple, but effective, changes at the current hospital that could improve services in the interim before the new hospital is completed. The study also gave potential bidders realistic operating data they could use when preparing their bids. Finally, the team developed the bidding documents and PPP agreement and helped the government with the tender process.

IFC will continue to advise the government for an additional 12 months during the early stage of implementation.

TRANSACTION STRUCTURE

The government wanted a new hospital that it could afford given its limited budget, but also needed to be sure that the same problems that the existing hospital faces—insufficient staff, maintenance, and supplies—would not be perpetuated. It also wanted the new hospital to have a lasting effect on local economic development.

To address the above, consortia were required to include specific targets for local participation in the project's equity, management, subcontracting, and community development as part of their bids. These targets, along with stated increases over the life of the contract, were incorporated in the final PPP agreement as contractual obligations.

Performance monitoring will also be comprehensive and employ a system designed by IFC that goes beyond what most health PPPs use. Performance will be monitored quarterly by an independent monitor jointly appointed by the government and the private operator and where it does not meet the required standards,

predetermined penalties will come into effect. Furthermore, the private operator will be required to obtain and maintain accreditation from the Council for Health Services Accreditation of Southern Africa. Failure to obtain and maintain this accreditation can result in termination of the agreement.

The project also includes the Joint Services Committee, established by the government and the private operator, to review performance and to develop mechanisms, procedures, and protocols that will improve services at the hospital and clinics.

BIDDING

Bidders were asked to submit their bids within minimum volume, service, and budget parameters to provide the government with a clear idea of what was possible within the range of affordability. Bids included a markup of the draft PPP agreement and bidders were scored on their technical proposals and then on their financial bids. Fourteen companies participated in the investors' conference and two companies submitted bids. A preferred bidder was selected for negotiations, which concluded with the signing of the final PPP agreement.

POST-TENDER RESULTS

- Construction started in March 2009, clinic services are scheduled to begin in late 2009, and the new hospital is to open in mid-2011.
- Tsepong will provide 65 percent of the financing through the Development Bank of Southern Africa and equity investors
- IFC's baseline study of the current hospital identified that Lesotho has one of the world's highest cervical cancer rates. No prevention or treatment programs were being provided and referrals to South Africa were too late to be effective. As a result, the government and the Lesotho-Boston University Health Alliance designed a pilot program. This program, supported in part by the Merck Vaccines Gardasil Access Program, began operation in February 2009 and will provide services to 25 percent of the women in Lesotho in the first year of operation. If the program is expanded across the country, it is expected to reduce the rate of cervical cancer by more than 90 percent within 10 years.

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India: Gujarat Solar

Gujarat province in India has a long-term goal of making its capital, Gandhinagar, a solar-powered city. With over 300 sunny days per year and supported by the Indian government's commitment to reducing carbon emissions, it plans to install 500 megawatts (MW) of solar capacity by March 2014. However, many commercial and technical issues need to be resolved for this to happen. As a first step, the government of Gujarat turned to IFC to help it with an innovative 5 MW solar rooftop public-private partnership (PPP) project to add power generating capacity, develop contractual models for further solar projects, and demonstrate the technical and economic feasibility of rooftop-based solar power.

Azure Power and SunEdison each won 25-year concessions for 2.5 MW solar rooftop projects. Under the agreement, the developers will install solar photovoltaic panels on the rooftops of public buildings and private residences and connect them to the grid. Besides attracting \$15 million in private investment, 12,000 people will benefit from increased access to power and 6,000 thousand tons of carbon emissions will be saved. The project agreements were signed in April 2012.

The project was implemented with financial support from the Netherlands and Finland.

BACKGROUND

The state of Gujarat, located in western India, has embraced the idea of renewable energy. With over 300 sunny days per year, the government of Gujarat plans to develop 500 MW of solar power capacity by March 2014 to meet its energy needs. It also plans to make its capital, Gandhinagar, a model solar city. However, many technical, regulatory and commercial challenges lie ahead. The government of Gujarat needed assistance in selecting the most appropriate technology, and suitable agreements between government, private investors, and the power procurer had to be concluded.

To pave the way for large-scale solar power development, the government sought private sector participation to finance and build two 2.5 MW pilot solar projects in Gandhinagar that will generate a total of five MW annually through rooftop solar panels. Although modest, the project will address issues constraining the adoption of solar power, provide extra power capacity to the grid, and contribute to the reduction of greenhouse gas emissions.

IFC'S ROLE

IFC was appointed lead transaction advisor to execute the pilot project by Gujarat's Department of Energy and Petrochemicals. Besides providing transaction advice, IFC's role included technical, legislative, analytical and marketing support. IFC's support included:

- Analyzing the technical options for solar panels, for example, using concentrated solar power or photovoltaic solar panels; resolving connectivity issues, and determining maintenance requirements. IFC recommended using solar panels mounted on rooftops;
- Reviewing social, legal and commercial issues related to renting rooftop space from residential and commercial buildings, and then developing terms for the rental agreements;
- Organizing an investors' conference to discuss the project with potential investors and obtain their feedback. Over 40 firms attended, demonstrating strong interest in the project;
- Leading discussions with the client and the local private distribution company, Torrent, on the power purchase agreement. IFC helped broker the terms so that Torrent would purchase electricity generated by the rooftop panels.

IFC also recommended a transaction structure and managed the bidding process, including preparation of bidding documents and evaluation of bids.

TRANSACTION STRUCTURE

IFC recommended a 25-year build, own, operate (BOO) concession.

Under the agreement, the winning bidders will place thousands of solar panels on rooftops throughout the city divided into two clusters, each with 2.5 MW of installed capacity. Most of these will be on public buildings, such as schools, hospitals, and offices.

The remaining panels will be placed on private residences, which will receive rental income for hosting the panels. The developers will then connect power generated by the panels to the city grid.

Total project cost is estimated to be \$15 million, all of which will be provided by the winning bidder. The government of Gujarat will provide access to roofs of buildings it owns, facilitate purchasing agreements with the power procurer for the electricity generated, and guarantee a subsidy if required.

The developer will be responsible for identifying private buildings that will participate in the project, producing solar power and delivering it to the grid.

BIDDING

Interest in the project was strong, with 38 firms submitting expressions of interest. The winning bidders were those quoting the lowest tariff.

Azure Power and SunEdison each won one of the two 2.5 MW projects. The project agreements, including the power purchase agreements (PPAs), were signed on April 20, 2012.

POST-TENDER RESULTS

- Improved access: 12,000 people will benefit from improved energy services at affordable prices with virtually no state subsidies.
- Mobilization of private sector investment: the transaction will attract \$15 million in private investment to the region.
- Public revenue: provides the government with a net annual revenue stream of \$400,000 for 25 years.
- Climate change: reduces carbon emissions by 6,000 tons annually.
- Proof of concept: demonstrates the technical, regulatory, and financial viability of rooftop solar panels, which will enable the expansion of solar power in Gandhinagar and elsewhere in India. As a result of this initiative, IFC has already signed mandates to advise on similar initiatives in five other cities in Gujarat.

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Brazil: Belo Horizonte Schools

Belo Horizonte, the third largest city in Brazil, has made early education a priority in an effort to improve the competitiveness of its workforce in the long term and support the national government's policy goals. With support from IFC, it turned to private sector funding and expertise to expand and strengthen its pre-school and primary school system. The concession—Brazil's first public-private partnership in the education sector—was awarded in July 2012.

The Educar Consortium, led by Odebrecht, a leading Brazilian construction company, won the 20-year concession to construct primary schools and preschool facilities. It will also operate non-pedagogical services, such as maintenance and security. The partnership will expand access to early education in Belo Horizonte, reaching 18,000 additional children and creating new jobs in the education sector.

IFC's advisory services for this project were supported by the Brazil Private Sector Partnership, a joint partnership of IFC with the Brazilian National Development Bank (BNDES) and the Inter-American Development Bank (IDB).

BACKGROUND

The municipality of Belo Horizonte, the capital of the Brazilian state of Minas Gerais, has made early education a top priority on its agenda. Demand for better education was strong, with over 11,000 children, many underprivileged, on a waiting list to enroll in school. The municipality also took a long-term view—a strong educational foundation would be necessary to improve the long-term competitiveness of the workforce in a growing region. Strengthening education is also an important objective of Brazil's federal government.

But the municipality's efforts have been hampered by technical and financial limitations. It faced a shortage of school buildings and only had the resources to meet approximately 35 percent of demand. It also lacked the resources to manage procurement of construction services and manage the non-pedagogical services of new schools. To address these issues, Belo Horizonte decided to explore the possibility of a private sector role to expand and strengthen its early education system.

IFC'S ROLE

The municipality appointed IFC as lead advisor to explore how private sector participation could help advance Belo Horizonte's early education system, and what mechanism could be used to do so. After conducting a detailed feasibility study, IFC recommended that the municipality enter into a public-private partnership (PPP) with a private-sector firm to address the shortage of preschools and primary schools.

Because a PPP had never been used in Brazil's educational system before, IFC used examples from other countries to develop a detailed model, demonstrating how a well-designed PPP could help the municipality meet its objectives. IFC facilitated discussions that allowed stakeholders to raise their concerns.

Expert consultants managed by IFC developed solutions to financial, technical and legal issues. These solutions were built into a transaction structure made available for public comments and inputs by potential investors. Following further refinement of the transaction structure, IFC helped draft tender documents, organize a public hearing, and manage the bidding process.

TRANSACTION STRUCTURE

IFC proposed a 20-year concession to finance, build, equip and operate non-pedagogical services of 32 new preschools and five primary schools. Compared with the traditional procurement process, private sector involvement will significantly shorten the time required to build and launch these new schools. The new units will be delivered within two years, which is a record in construction procurement timing by governments. Primary schools will then become operational in about one year.

Under the terms of the concession, the municipality is required to provide sites for the facilities while the private sector partner is responsible for the construction and operation of non-pedagogical services, such as cleaning, surveillance, laundry, maintenance, and utilities management. This approach improves the overall administrative efficiency of managing early educational facilities by consolidating these services under a single provider. This also enables the directors of the schools to focus on teaching rather than managing multiple vendors.

The private partner will be measured according to a set of performance and availability indicators which will then be assessed by an independent verifier.

BIDDING

The private partner was selected through a competitive bidding process facilitated by IFC. Bidders that met minimum technical requirements were selected on a cost basis.

The municipality received two qualified bids from two Brazilian construction companies—Andrade Gutierrez and Odebrecht. The Educar Consortium, consisting of Construtora Norberto Odebrecht and Odebrecht Participações e Investimentos (both of which are subsidiaries of Odebrecht S.A.), won the concession.

The PPP contract was signed on July 25, 2012.

POST-TENDER RESULTS

- Provides for the construction and operation of non-pedagogical services of 37 new schools (32 preschools and five primary schools) in less time and at lower cost.
- 18,000 children from low-income areas of the municipality will be able to attend kindergarten and elementary school.
- Mobilizes \$80 million in private sector investment.
- Offers tremendous replication potential in other states and municipalities of the country, supporting the overarching educational policy of Brazil's federal government.



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