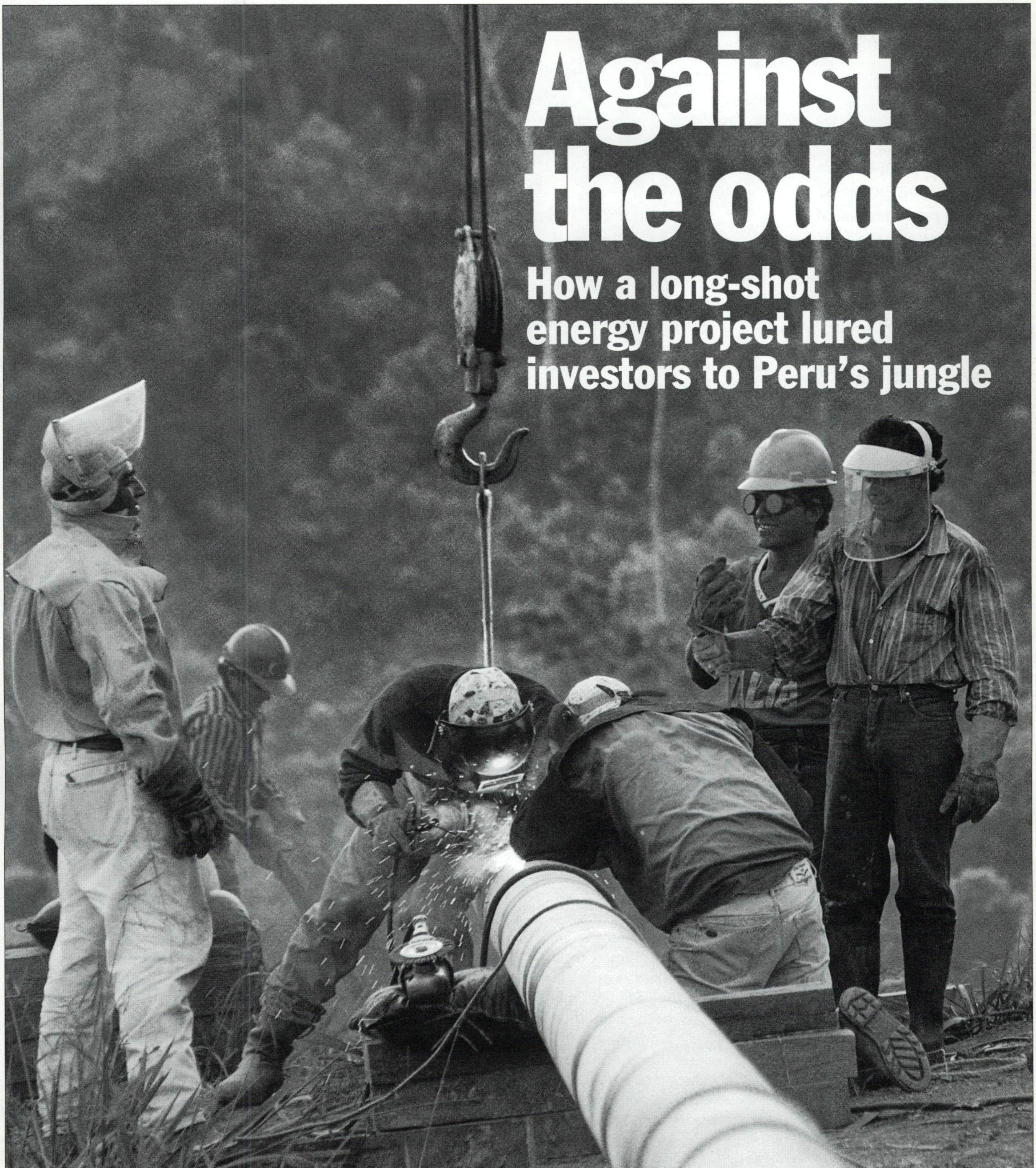
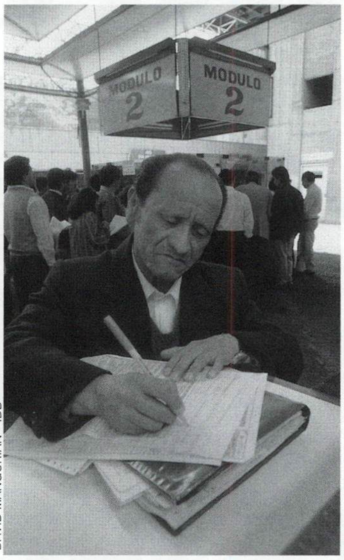
■ ASIAN CRISIS: WHO'S TO BLAME? ■ TAX REFORM ■ GREENHOUSE GASES FOR SALE

IDB AMÉRICA

Magazine of the Inter-American Development Bank March 1998



Peru's tax program is way off the charts.



DAVID MANGURIAN—IDB

How Peru made tax collection more efficient—and more popular. Story on page 11.

THE COVER

Against the odds. Workers near the village of San Alejandro in the Andean foothills of Eastern Peru weld a section of steel pipe that will transport natural gas to fuel electric plants in the towns of Aguaytía and Pucallpa. The pipeline is part of an innovative private-sector gas and electricity project partly financed by the IDB. Story on page 4.
—IDB photo by David Mangurian

DAVID MANGURIAN—IDB

EDITORS' NOTEBOOK

An orchestra comes to town

IT WAS A TYPICAL NOVEMBER afternoon at the IDB's Washington, D.C. headquarters. In the upper floors, officials were busy processing accounts, analyzing projects, attending meetings and carrying out all of the other work that goes on at a large multilateral finance institution.

But things were different in the basement. There, 134 spirited youngsters had just arrived. They threw down their coats and popped the latches on their instrument cases. A pair of violinists ran through the opening bars of the William Tell Overture. A trumpet and a clarinet jammed in a corner. The wails of oboes mingled with the grunts of tubas.

They could have been a bunch of kids anywhere. But later, when the conductor lowered his baton, they became something else: an orchestra, and a very fine one.

The Venezuelan National Youth Orchestra's 1995 visit was the Bank's first introduction to a remarkable artistic and social movement that has now come full circle with the approval of a loan to help consolidate and expand the country's youth music program (see page 16).

DAVID MANGURIAN—IDB

A shining moment for young musicians.

The young guests at the IDB were only the tip of an artistic pyramid in Venezuela made up of thousands of other youths—children of laborers as well as lawyers—from throughout the country. For them, music has become something they can give to themselves, to their families and to their communities.

Similarly their hour-long performance was the end product of years of hard work. Many readers of this publication know what it takes to cajole kids to practice their instruments and get them to do their lessons and rehearsals. Most of the young Venezuelan musicians come from families whose parents have no musical background, little education, and limited time to provide support. The youths have made it largely on their own initiative, spurred on by the knowledge that an orchestra is a meritocracy in which success depends not on who you are, but what you can do.

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Quotable

"Satellite images don't show [national] boundaries, they only show cities."

Pascual Maragall, former mayor of Barcelona, quoted in an EFE report on Feb. 4. Maragall spoke to municipal officials in Quito, Ecuador, on the economic and social needs of cities. He advocated the creation of organizations for large cities, to help integrate the world's urban centers.

"We may be witnessing the emergence of an anti-dumping coalition."

Greg Rushford, editor of The Rushford Report, a Washington, D.C., trade newsletter, quoted in a Jan. 22 The New York Times article on an anti-dumping suit filed against Chilean salmon exporters by U.S. salmon producers last year. The U.S. Commerce Department essentially rejected the suit in January after it was criticized by a group of U.S. restaurants, distributors and supermarkets that buy Chilean salmon.

"...democracy [is] the political system most in harmony with human nature."

Pope John Paul II, quoting Cuban patriot and priest Félix Varela, during a speech at the University of Havana last January.

"Simply by opening the electricity market to cross-border competition in the Central American region, production costs would drop by two cents per kilowatt hour."

René Castro, Costa Rican minister of environment and energy, quoted by Reuters on Jan. 14.

"I will resist the temptation to teach lessons or give advice."

Mexican president Ernesto Zedillo, during a speech at the Davos meeting of business leaders in February, quoted in The New York Times, Feb. 2. Zedillo was referring to the relatively limited damage that Mexico has endured in the wake of the Asian financial crisis.

■ VIEWPOINT ■

The next stage for free trade

By ROBERT DEVLIN and ANTONI ESTEVADEORDAL

WHEN THE HEADS OF state of the nations of the hemisphere gather next month in Santiago, Chile, one item on nearly everyone's agenda will be the probable launching of negotiations for the Free Trade Area of the Americas (FTAA).

One of the most ambitious economic initiatives ever, the FTAA process aims at nothing less than reaching an agreement by the year 2005 for the removal of barriers to trade among 34 countries in the hemisphere.

Public attention on the FTAA has recently been focused on the headline-grabbing political tug-of-war in the United States over "fast track" legislation. And clearly, if the U.S. administration were to get that trade negotiating authority before the Santiago summit, it would give the FTAA negotiations a running start.

However, even if "fast track" is delayed, governments can use the groundwork laid during the past three years to make significant progress.

Much of this preparatory work has been spearheaded by 12 inter-governmental working groups with the technical support of a Tripartite Committee made up of the IDB, the Organization of American States and the Economic Commission for Latin America and the Caribbean. These working groups have assembled a series of unprecedented trade-related data bases, studies and inventories, and have built a framework for the coming negotiations.

This preliminary stage has been remarkably successful to date, and indeed represents the most advanced component of the hemispheric agenda originally set in the 1994 Miami Summit of Heads of State. What explains this success?

The first reason is that the FTAA is being built on a convergence of interests. In a word, the nations of Latin America and the Caribbean are now almost uniformly committed to free trade and regionalism as a powerful instrument of development.

Second, the FTAA process has a clear goal—an agreement by 2005—as well as commitments at the highest political level. Further, it has a detailed plan of action with precise terms of reference, performance benchmarks and pre-programmed meetings of technicians, vice ministers and ministers.

■ Even if 'fast track' is delayed, governments can make significant progress in the free trade agenda. ■

Will borders remain open?

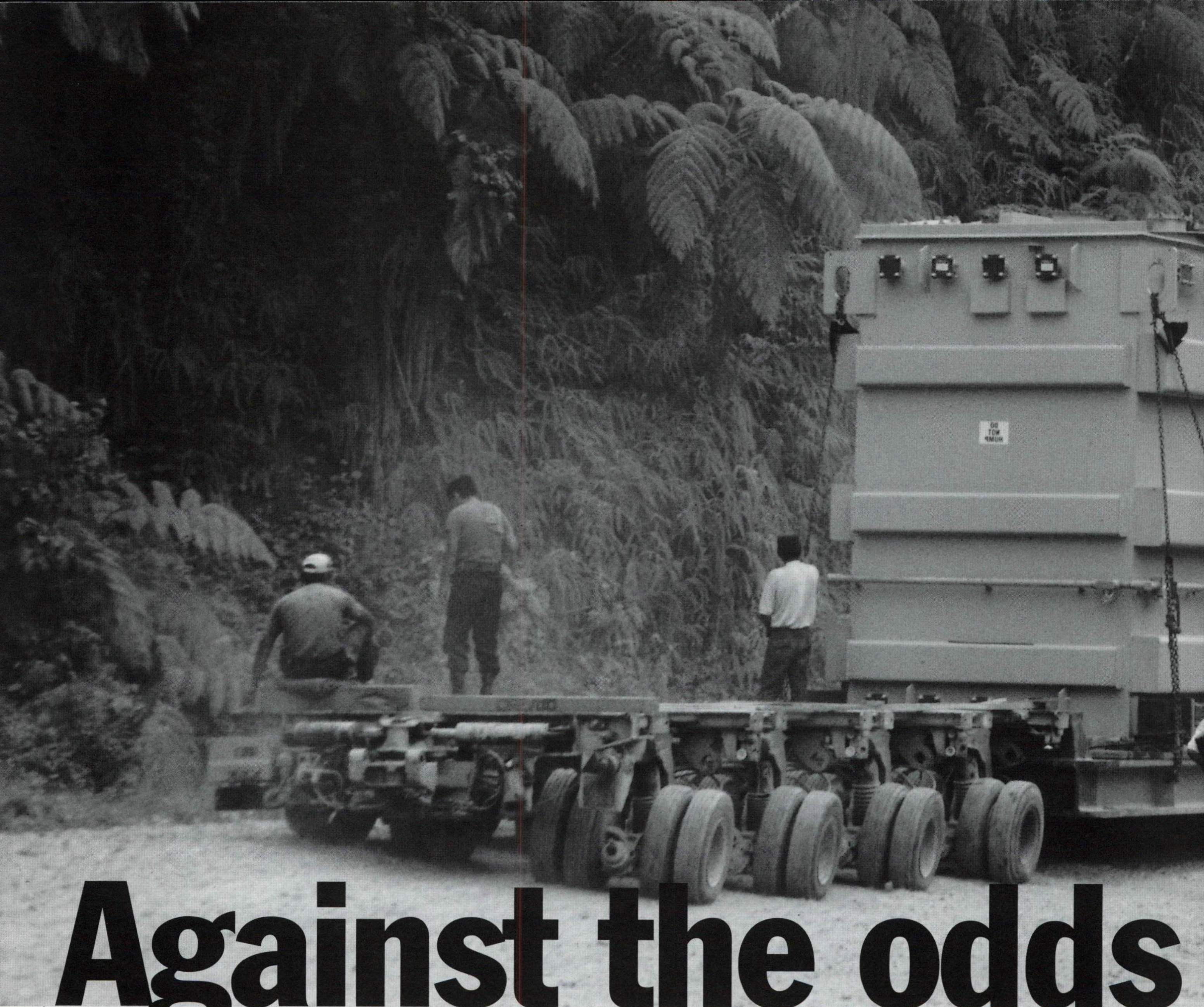
Finally, the decision to use the OAS/IDB/ECLAC Tripartite Committee as a source of technical support in lieu of a more formal and costly institutional structure proved to be a wise one.

It is important to keep in mind as we enter the next stage that effective and lasting agreements must be founded on good negotiations. For this, the region's governments must have access to financing for technical assistance from development agencies to further strengthen their trade-related agencies and other government institutions. Unfortunately, the demand for nonreimbursable technical assistance is outstripping supplies. Therefore, governments might want to consider making more use of reimbursable funding to support comprehensive and integrated institutional development in the area of trade. After all, the returns on this kind of investment are considerable, given the impact of trade negotiations on the private sector and the national economy.

Other factors will have a great deal to do with the sustainability of an FTAA agreement. One is improved communication between governments and the business and labor sectors. Another is national and hemispheric education campaigns on the benefits of free trade as well as realistic assessments of costs and ways to deal with them. The FTAA negotiation process must also take into account developments in subregional integration schemes which often have more extensive and deeper objectives; these can legitimately be the first priority of member countries.

Last but not least, the extent to which countries maximize the benefits of the FTAA and minimize its costs will depend on their ability to consolidate their first round of economic reforms and vigorously pursue second generation reforms, especially in the social area.

—The authors are, respectively, chief of the IDB's Integration, Trade and Hemispheric Issues Division; and the division's FTAA technical support coordinator.



Against the odds

How a seemingly hopeless energy project became a model for investors

By DAVID MANGURIAN

THE PLAN THAT MAPLE GAS CORP. OF Dallas, Texas, took to prospective investors seemed a long shot at best.

It was 1993, and the company was proposing to drill gas wells in a remote section of the Peruvian jungle that was controlled by anti-government subversives. The gas would fuel an electric power plant to be built next to a town controlled by cocaine drug traffickers. And all of this would happen in a country that was just getting its yearly inflation rate below three digits and was still an outcast to the world's financial community.

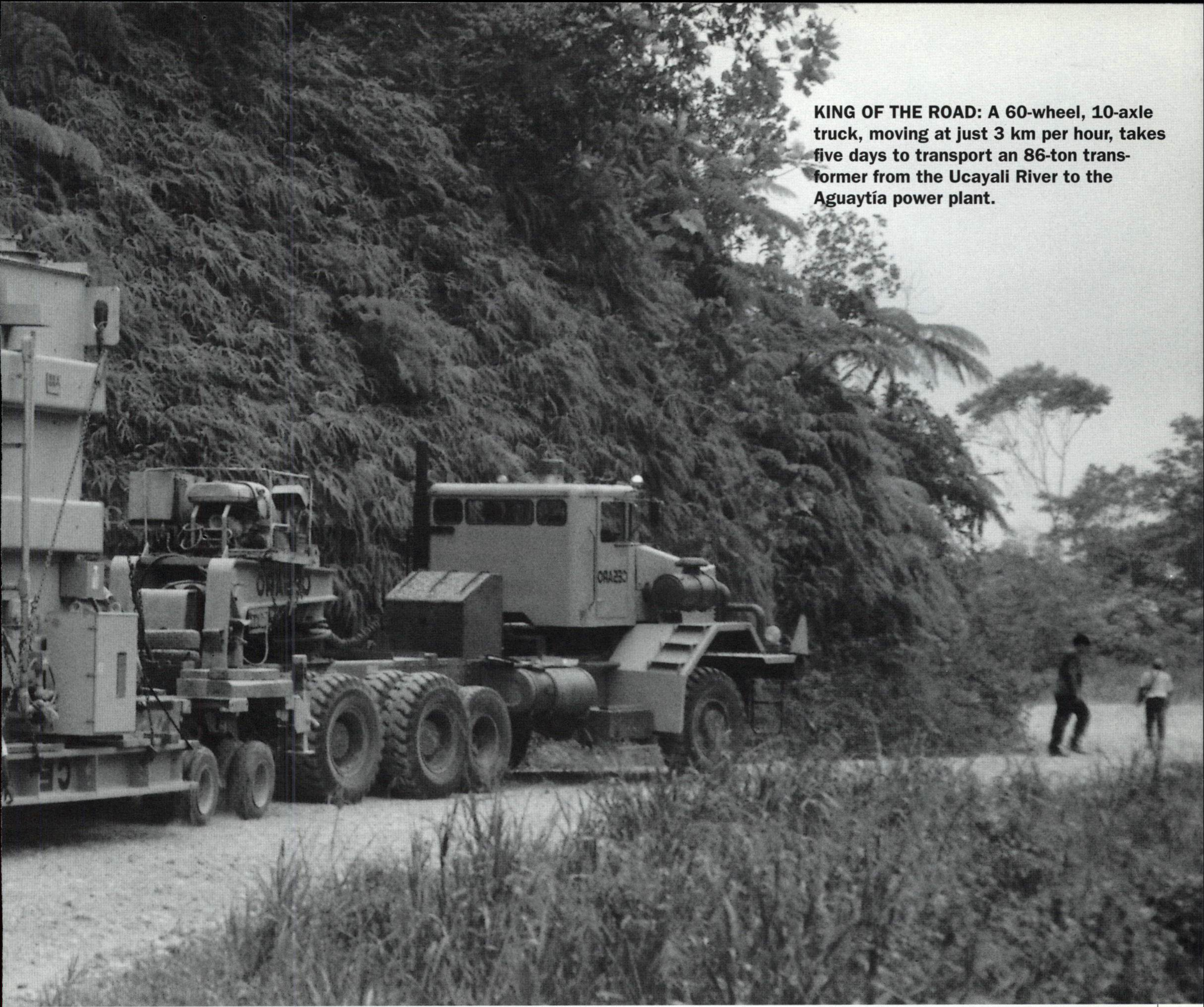
Furthermore, the proposed facilities would be built east of the Andes Mountains, meaning that thousands of tons of equipment and material would have to be shipped 3,200 km up the Amazon River by freighter, then off-loaded onto barges and hauled another 800 km up the smaller Ucayali River during the four-month rainy season when the river was deep enough for barges to reach their destination (see page 7). Then the equipment would be trucked to the project sites on washboard-surfaced, potholed dirt roads that turned to mud when it rained.

The price tag? A quarter of a billion dollars. Not an easy sell.

The idea might have seemed far fetched, except that the economic case for the project was overwhelmingly strong. Peru's electricity demands were growing 9 percent a year. The country desperately needed more low-cost power, and the gas was just 2,500 meters under the jungle floor. The project's payback period was calculated at less than eight years and the profit potential was excellent.

It looked like a perfect opportunity for Maple Gas. The company had just sold off most of its assets in the United States to concentrate on developing a more lucrative foreign venture. At the same time, Peru had started privatizing its energy sector and was preparing to award concessions to commercialize existing hydrocarbon reserves. Among the properties the government was putting up for bid was the Aguaytía gas field, which had been discovered by Mobil Oil in 1961 in the jungle west of Pucallpa. The field had never been developed because of the high cost of building a pipeline to transport the gas over the Andes to Peru's coastal cities.

Maple executives saw a different way to tackle the problem of getting the energy from the wellhead to the consumer. They proposed building a gas-powered electricity generating plant at Aguaytía and running



KING OF THE ROAD: A 60-wheel, 10-axle truck, moving at just 3 km per hour, takes five days to transport an 86-ton transformer from the Ucayali River to the Aguaytía power plant.

DAVID MANGURIAN—IDB

transmission lines across the Andes, figuring that this alternative would cost much less than a pipeline.

In 1993, Maple outbid other companies in a public auction to win a 30-year concession to develop and commercialize the Aguaytía gas field. As soon as the concession papers were signed in early 1994, and long before Maple had any guarantee of financing, the company began planning for construction. In fact, Maple became so confident of success that it began putting most of its money into the Aguaytía project.

The first thing Maple did after it won the concession was to run tests on the wells drilled in the Aguaytía field 33 years earlier to confirm the results. Maple hired a burly, retired Peruvian special forces commander, Jorge Meza, to assemble a security team to protect people working in the project area. Although the Peruvian government had by then made substantial progress in controlling guerillas and drug trafficking, security was still a very real problem.

"It was still an area of high risk from subversives," recalls César Valderrama, area operations manager for Maple Gas. "We practically had a regiment of marines at the well site. It looked like a battlefield. We were surrounded by soldiers."

Meza and others also recommended a community action program to develop long-term relationships with residents near the project's multiple sites, and thereby help avoid local opposition that might delay construction. Maple sent medical teams into villages to immunize children and teach basic hygiene, and the company sponsored programs with local schools.

Search for investors. The well tests proved positive: there was enough gas to fuel a new 155,000 kW power plant as well as Pucallpa's existing 20,000 kW power plant for at least 28 years. In addition, gas liquids could be processed into bottled gas for cooking and gasolines to generate further income. Maple now had a viable "integrated" gas and electricity project to sell potential investors.

But investors were skeptical, particularly when they saw the local conditions. Meza recalls one instance: "I drove a group of Americans across the route of the [planned] transmission lines. No car had been there for 30 years. We had to spend the night in a very poor hotel high in the Andes. These were investors used to five star hotels. So I told them: 'Tonight you'll be staying at a hotel with more than five stars. You'll be at a hotel with all the stars of the heavens.'"

But as the months passed, the strengths of Maple's proposal became increasingly apparent. By 1996 the company had put together a group of equity investors and banks willing to commit a total of $254 million to the project, including a $60 million loan from the IDB. The financing arrangement broke new ground and drew accolades from inter-

(continued on next page)

DAVID MANGURIAN—IDB

ON SITE: Drillers at the Aguaytía gas wells endure steamy temperatures, torrential rains and occasional encounters with snakes and tarantulas.

national project finance experts (See page 13). In Peru, the project was seen as a resounding vindication of the government's privatization program. "Aguaytía is the first private sector 'test' of Peru's economic reforms," stated the IDB loan document.

Construction began in August, 1996, and was to be completed in just 18 months. Contractors would be charged substantial penalties for each day of delay. The company hired some 2,200 construction workers. Conditions in the jungle were tough: high humidity, temperatures up to 45°C, tarantulas and poisonous snakes, and frequent, thundering downpours that mired trucks and equipment in mud.

"You either catch cold from the air conditioning, or you have stomach problems from the water, or both," says Beat Naef, project manager of the electricity plant for Asea Brown Boveri, a Swiss/Swedish firm that won turn-key contracts to carry out the project, except for the gas well drilling.

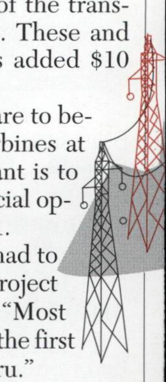
Planning had to be meticulous because of the extremely complicated logistics. If the giant generators, transformers and other pieces of heavy equipment and machinery were not built and shipped on time, they would not make it the 4,000 km up the Amazon and Ucayali rivers to Pucallpa before the river level dropped to unnavigable levels.

The equipment started arriving in January 1997. "We unloaded the last shipment on the last day Pucallpa's port was open," recalls Valderrama.

Now the 122-ton generators, 86-ton transformers and other equipment had to be hoisted off the barges and onto the trucks for their arduous trip overland to Aguaytía. This would be the job of a 140-ton crane, which was trucked in from Lima in six pieces, a 785-km trip that took four days.

A special 60-wheel 10-axle flat bed truck (which itself weighed 36 tons) was brought in to transport the heaviest equipment to the various sites. A U.S. engineering firm was contracted to strengthen the 12 bridges on the 164-km road between Pucallpa and Aguaytía. Where it was too expensive to reinforce the bridges, crews built bypasses. Each heavy load took about a week to reach Aguaytía, moving at a tortuous three km per hour. Trucking costs alone were $3 million.

"If you had a heavy load on a truck and it rained, you had to wait for hours after the rain stopped for the road to dry before you could move on," says Naef. The 300 km of pipelines for natural gas and natural gas liquids and 400 km of electricity transmission lines were routed alongside existing roads in order to minimize the impact on the environment. Maple employed a team of archeologists to ensure that important sites were not disturbed by construction of the transmission lines across the Andes. These and other environmental measures added $10 million to the project's cost.



This March, gas operations are to begin and one of the two gas turbines at the Aguaytía electric power plant is to begin operations. Full commercial operations are expected by April 1.

"The officers of Maple Gas had to have a lot of tenacity to sell this project to investors," says Valderrama. "Most were afraid. Aguaytía was one of the first large private investments in Peru."

Much has changed in Peru since Maple Gas arrived on the scene. The country has consolidated sweeping economic reforms and is becoming a magnet for investors. In 1997 the inflation rate dropped to 7 percent and private foreign direct investment hit $7 billion, four times the 1993 level.

The Aguaytía project now looks like a superb investment, not the risky venture of five years ago. "It has become an example for other companies to follow," said Valderrama.

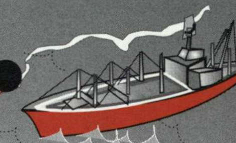
For further information about Aguaytía, go to www.aguaytia.com.

Journey across South America

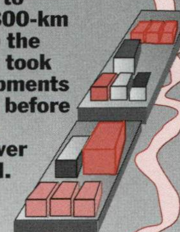
The simple solution—piping the gas from the Aguaytía fields across the Andes—was too expensive. So Maple Gas designed a financially sound project to turn the gas into saleable products right in the Pucallpa Valley and send these to market at a much lower cost. Meticulous planning got the entire project built in just 18 months.

Project manager Beat Naef: his crews met their deadline.

Iquitos



1. Up the Amazon to Iquitos: 43,000 tons of heavy equipment and materials were transported from Europe and the United States.



2. From Iquitos to Pucallpa: a 800-km barge trip up the Ucayali River took 20 days. Shipments had to arrive before rainy season ended and river level dropped.

Gas liquid fractionation plant produces cooking fuel and natural gasolines.

Gas from Aguaytía fuels Pucallpa's existing 20,000 kW power plant, reducing electricity costs 30-40 percent.

Jungle boomtown, Pucallpa was proyect headquarters.

Gas processing plant at Aguaytía field(shaded area) separates natural gas and gas liquids.

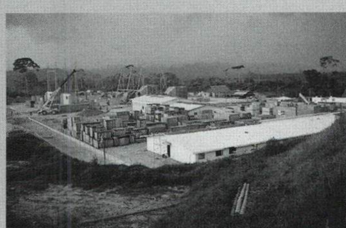
Gas liquid pipeline

Gas pipeline

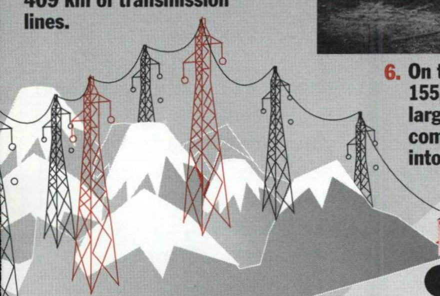
Pucallpa

At refinery, natural gasolines produced at fractionation plant are processed into motor and aviation fuel and kerosene.

7. Across the snowcapped Andes, 957 towers support 409 km of transmission lines.



6. On the outskirts of Aguaytía, a 155,000 kW power plant built largely from pre-assembled components turns gas into electricity.

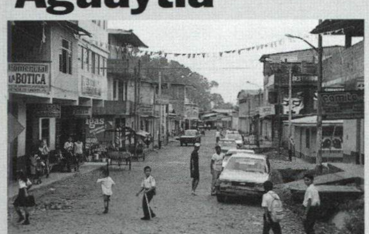


4. En route to Aguaytía, 12 bridges were reinforced to handle loads up to 158 tons move, or were bypassed.

3. Crane weighing 140 tons was trucked 785 km from Lima to off-load barges.

5. Heavy equipment hauled on a 10-axle 60-wheel flatbed truck up to 164 km to construction sites. Top speed: 3 km per hour.

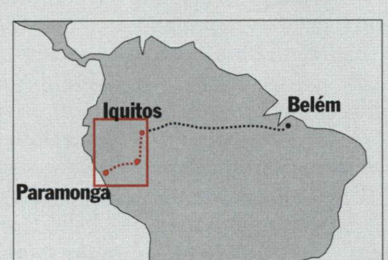
Aguaytía



Small town braces for a boom.

Paramonga

Electricity from Aguaytía feeds into Peru's north-central power grid.



A 4,600-km odyssey: more than 40,000 tons of equipment and materials were shipped across South America to construct gas processing plants, pipelines and a power plant that transmits electricity over the Andes Mountains to the Pacific Coast. See above sequence 1–7.

IDB PHOTOS BY DAVID MANGURIAN
GRAPHICS BY CECILIA JACOBSON

A question of confidence

Latin America is giving investors some good new reasons to finance infrastructure projects

By PAUL CONSTANCE

SUBTERRANEAN EXPLOSIONS. RIVERS OF concrete. Giant earth-moving machines.

Large infrastructure projects evoke images of a physical world reshaped by raw energy and man-made materials. But of all the ingredients required to build highways, dams, pipelines or electricity grids, the most essential is actually intangible.

That's because infrastructure projects, and particularly those financed by private investors, are built on confidence. Confidence that a government will honor the terms of its contracts. Confidence that an economy will be managed well enough to justify projections of future demand. Confidence that laws and regulations that affect the profitability of infrastructure projects will not be changed arbitrarily.

■ Today, fully 15 percent of all infrastructure spending in Latin America and the Caribbean is financed by the private sector. ■

Until recently, that kind of confidence was a scarce commodity in the nations of Latin America and the Caribbean. As a result, very few private investors were willing to risk committing funds to projects that can take many years to recoup costs and generate profits. Infrastructure projects had to be financed entirely by governments, a limitation that both held back development and tied up resources that could have been spent on other priorities.

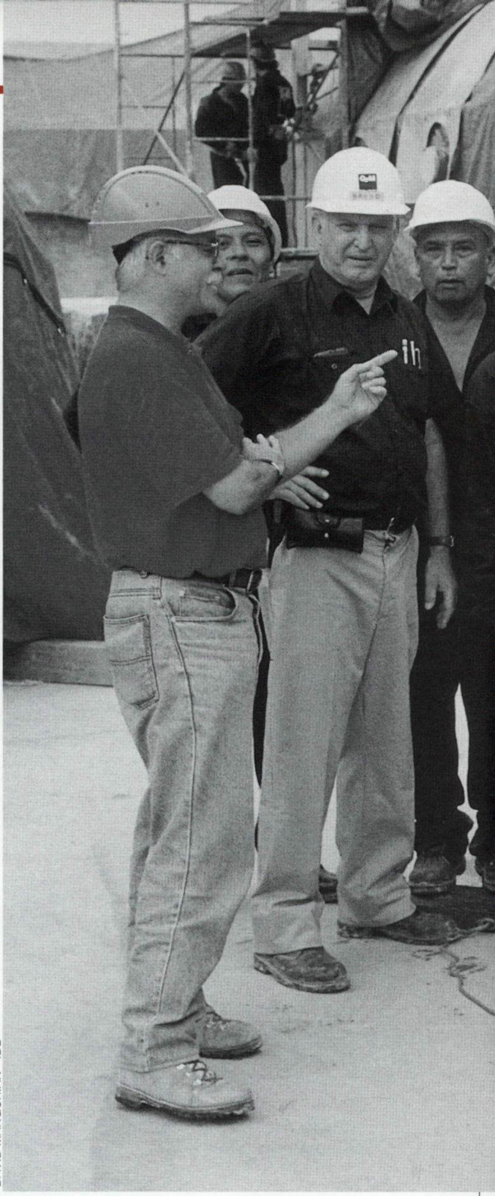
But in the late 1980s, things began to change, according to Antonio Vives, deputy manager of the IDB's Sustainable Development Department. By then, many countries were adopting financial, regulatory and trade reforms that were creating a more attractive environment for long-term investments by the private sector.

Privatization policies also helped. Telecommunications and energy, the two sectors where most privatizations took place, have attracted tens of billions of dollars in domestic and international private capital. To a much lesser degree, transportation, water and sanitation services are also benefiting from private investment. Today, Vives estimates, fully 15 percent of all infrastructure spending in Latin America and the Caribbean is financed by the private sector. Around 10 percent comes from multilateral development banks with the remainder still provided by the region's governments.

Still, the problem of confidence remains daunting. To overcome investors' doubts, private companies in the last five years have developed innovative financing arrangements that spread the economic risk of a project among governments, banks, contractors, institutional investors and development banks.

The IDB supports the efforts of firms to put together these innovative financing packages in several ways. First, it helps governments to modernize the laws, institutions, and regulatory entities that affect infrastructure investments and international capital flows. The IDB's Multilateral Investment Fund (MIF) has taken the lead in this area. Most of the 32 energy, transportation and water projects it has financed in the past several years are helping governments to create the legal and regulatory framework necessary to privatize or grant concessions to the private sector. MIF operations include airport privatization in Jamaica, cruise tourism facilities in the port of Bridgetown, Barbados, and a program to strengthen Mexico's Energy Regulatory Commission.

The Bank also invests directly in private infrastructure projects. The IDB's Private Sector Department targets projects where the Bank's size, experience, special relationship with the governments, and AAA credit rating can provide the extra measure of confidence needed to bring in private investors. By late 1997, the IDB had approved direct financing

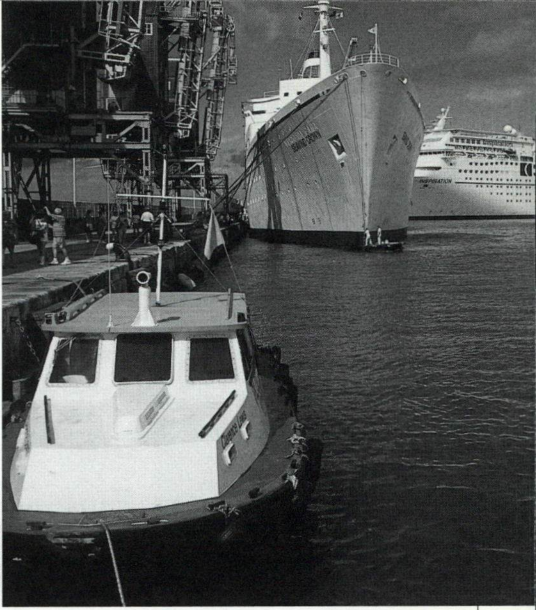


DAVID MANGURIAN—IDB

totaling $640 million for 18 energy, transportation and water and sanitation projects in nine countries worth more than $4 billion. In addition to the Aguaytía project profiled on page 4, these projects have included toll roads in Argentina, Brazil and Uruguay, and power projects in Honduras, Mexico and Colombia.

At the same time, the Inter-American Investment Corporation (IIC), a member of the IDB Group, has pioneered investments in small-scale infrastructure projects throughout the region. Since 1989, the IIC has lent $51.9 million to 14 projects in transportation, warehousing, potable water, telecommunications and power generation. One noteworthy investment in 1992 (a $3 million loan and $1.4 million in equity) went to IMPSAT Argentina, a company that was then providing satellite-based data networks to corporate clients around Buenos Aires. IMPSAT was so successful that it subsequently expanded to Ecuador, Mexico, Peru, Venezuela and Colombia.

The IIC has also financed specialized private investment funds that target Latin American infrastructure projects. It contrib-



WILLIE HEINZ—IDB

PRIVATE FINANCE. Workers and foremen at the Aguaytía gas project in Peru; the Port of Bridgetown, Barbados; and a privately run toll road in Colombia.

WILLIE HEINZ—IDB

uted $5 million to the Latin American Energy and Electricity Fund (FondElec), a $50 million fund owned by six United States electricity companies, and late last year it placed an additional $5 million in FondElec Essential Services Growth Fund, a new vehicle that will invest up to $100 million over eight years in projects in the region.

In one of the most innovative IDB projects in the infrastructure sector, money did not actually change hands. In April 1997 the Bank approved its first-ever partial risk guarantee for private investors' for a wastewater treatment plant in Bogotá, Colombia. To reduce long-term contract and currency risks associated with operating the plant, the IDB guaranteed $30 million to senior debt note holders investing in the project, which is run by the Colombian subsidiary of the French water company Lyonnaise des Eaux.

"The Bank was able to do this because of its preferred creditor status," explained Blair Thomas, a former IDB official who served as team leader on the project. "When we cover these risks, we unlock the whole financial package and make it work." The operation represented the first guarantee ever granted by a multilateral institution for private sector financing in Latin America. It was also the first IDB private sector project in which a private placement of securities was used as the principal source of debt financing.

According to Vives, most private investment in Latin American infrastructure has come from foreign lenders, particularly insurance companies and banks. "Although welcome, these funds are still quite limited," he said. "A much bigger pool of potential investment capital is held by institutional investors [such as pension funds] in the industrialized countries that cannot invest in infrastructure because most of these projects are not considered 'investment grade' by ratings agencies." Likewise, infrastructure projects in the region are only beginning to tap the international capital markets, primarily by issuing bonds, and less frequently through offers of equity, he added.

The best way to overcome the limited supply of foreign capital, according to Vives, is to improve the region's own capital markets and attract local investors. Consider the case of Autopistas del Sol, S.A., a consortium of Argentine, Italian and Spanish companies that owns a 23-year concession to operate a crucial access road to the city of Buenos Aires. The consortium complemented $133.3 million of its own equity in the project with $356 million in construction loans from local banks. Its 18-lane toll road, opened in 1996, was an immediate success, cutting commuting times from 2.5 hours to as little as 45 minutes for some 250,000 drivers. Investor confidence in Argentina's long-term economic prospects persuaded the consortium to refinance its debt last July by issuing bonds on the domestic and U.S. capital markets. The bonds, totaling $380 million, were rated BB- by Standard & Poor's and were snapped up by a combination of U.S. investors and Argentine pension funds. Under the terms of the concession, Autopistas del Sol must also hold an initial public offering of a 30 percent stake of its capital stock by August 1999, meaning that even small investors will have a chance to own a piece of the firm.

"That's the kind of creative financing that brings local money into local projects," said the IDB's Vives. "We hope to see a lot more of that in the future."

Financing to reduce poverty

The IDB's 1997 lending reflects social priorities, says report presented at Cartagena

PROJECTS TO IMPROVE SOCIAL CONDItions and reduce poverty in the region accounted for 43 percent of the more than $6 billion in IDB loans approved last year, according to the 1997 edition of the Bank's Annual Report.

Included were projects to improve education and health services, modernize neighborhoods, and expand opportunities for women, children and indigenous people.

The Bank last year also financed projects to help Latin America and the Caribbean consolidate the major economic reforms they have already undertaken as well as move ahead on a series of "second generation" reforms. Other projects will boost civil society, increase equity and strengthen democratic institutions.

Operations totaling $575 were approved for projects designed to improve the efficiency of the state.

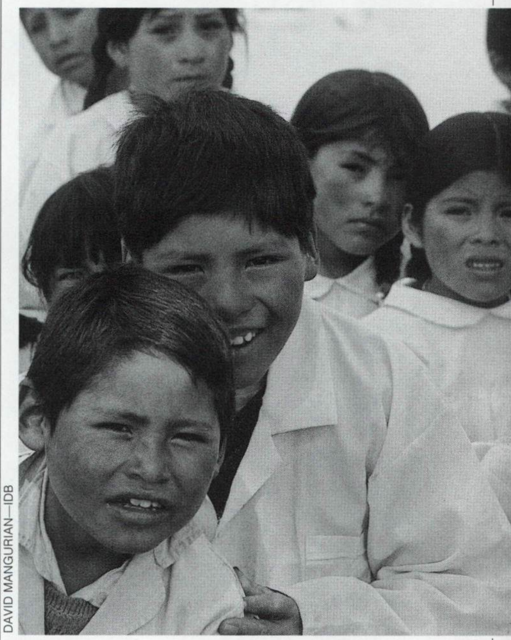
The Annual Report will be reviewed by the Bank's Board of Governors meeting in Cartagena, Colombia, March 16–18. The meeting, which is expected to draw some 2,500 participants, is the principal yearly forum for discussing economic and social development issues in Latin America. Among the numerous events taking place prior to and during the meeting will be four IDB seminars on citizen involvement in social programs, building peaceable societies, investing in Latin America and the Caribbean, and the unemployment problem.

In the area of economic integration, the Bank last year continued to be a source of technical support to consolidate subregional and hemispheric links, including the Free Trade Area of the Americas. It also financed projects to strengthen the Central American Bank for Economic Integration as well as a Bolivia/Brazil gas pipeline and the interconnection of Central America's electrical systems.

In the field of environment, the Bank last year approved financing for its first project dedicated exclusively to energy conservation and rational energy consumption and its first financing to a private company in the area of water and sanitation.

IDB direct lending to the private sector increased considerably last year over the 1996 level, to $320 million. Moreover, the Bank's participation has mobilized debt and equity capital averaging more than six times the amount of IDB financing.

According to an annual assessment of the Bank's portfolio, 86 percent of the 419 major projects under execution are on track to achieve their objectives. Action plans for each of the remaining 54 projects that need corrective action will be developed and their progress monitored. The Bank also identified 112 projects that were experiencing some degree of difficulties, in most cases due to weaknesses in the executing agencies.



DAVID MANGURIAN—IDB

Better education: a top IDB priority.

Bucks yield bigger bang

Catalytic effect from IIC funding

SMALL AND MEDIUM-SIZED ENTERprises in Latin America and the Caribbean last year received financing totaling $150 million for 25 projects from the Inter-American Investment Corporation (IIC).

According to the IIC's recently published 1997 Annual Report, 40 percent of the funds approved were for equity investments, and 60 percent for loans. Seven of the equity investments went to new or existing country or regional investment funds, according to the report, which will be presented to the IIC's Board of Governors at its annual meeting March 17 in Cartagena, Colombia.

The IIC's lending operations last year also had an important catalytic effect through cofinancing. These operations used $33 million of the Corporation's own resources to mobilize a total of $25 million in funding from banks and other third parties.

Among other developments last year were the following:

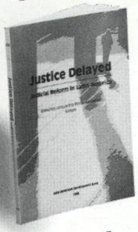
- Increase in the Corporation's membership to 35 countries with the entry of Denmark. Discussions on IIC membership were also conducted with six other countries.
- Creation of a database on small and medium-sized enterprises in Latin America and the Caribbean.
- Provision of advisory services to the Emerging Markets Partnership, which set up a $1 billion fund to invest in infrastructure projects in Latin America.
- Approval of a $300 million IDB loan to the IIC to increase the supply of credit to small and medium-sized businesses.

Long-term commitment. Reviewing the region's economic landscape, the Annual Report finds that the burgeoning flow of direct and institutional investment has largely bypassed small and medium-sized companies. Given the importance of these firms for Latin America's economic output and job creation, the region's ability to sustain its growth will depend on a ready supply of private investment that is willing to commit to the long term.

The Inter-American Investment Corporation, which began operations in 1989 with a capital base of $200 million, by the end of 1997 had leveraged that capital to finance or mobilize financing for projects with a total cost of $3 billion.

IN PRINT

A question of justice

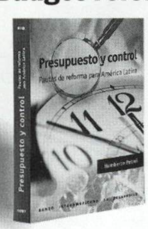


For many Latin Americans, contact with their countries' legal systems can be an unpleasant experience involving long delays, extensive case backlogs, limited access, and lack of transparency and predictability.

According to one distinguished Peruvian jurist, a person in pretrial detention who has no attorney may never even get a verdict: "Someone else has to move the case, for the judge will not."

But the impact of Latin America's judicial problems extends beyond the world of courts and judges. In *Justice Delayed,* leading authorities on law and economics from Latin America and the United States show how the future of the region's democratic institutions will depend on impartial and reliable systems of justice. They describe how judicial reforms are the key to resolving issues such as modernization of the law, protection of fundamental rights, the struggle against corruption and controlling violence.

Budget reforms



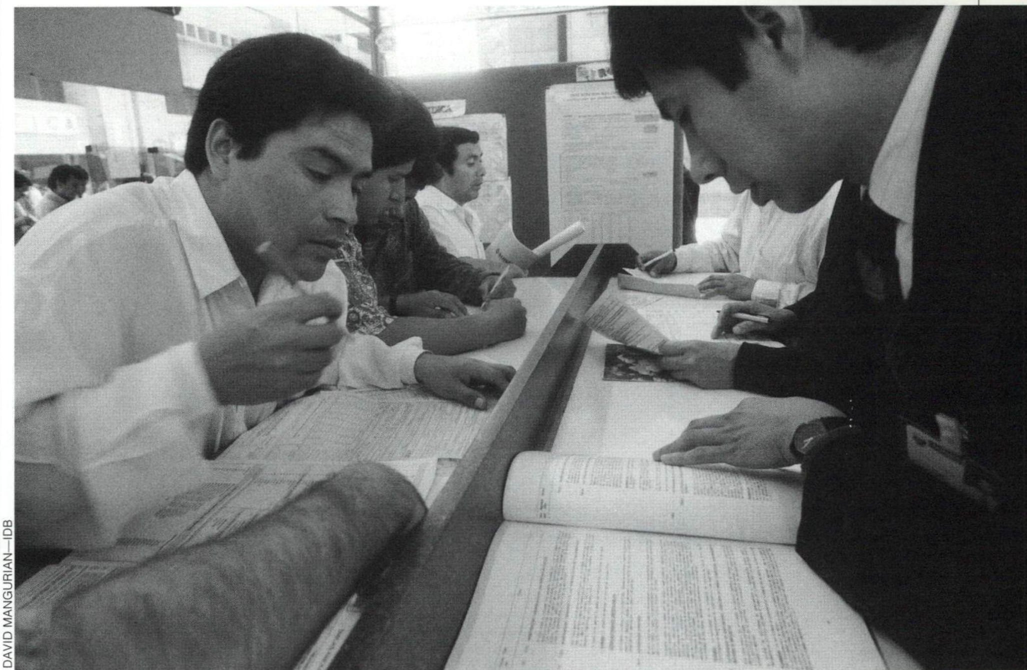
As the role of the state in Latin America changes, and an increasingly vocal citizenry demands greater governmental transparency, pressure is on to increase the efficiency of the public sector. At the same time, governments must carry out programs that voters want and respond to pressures from lobbying interests and civil society groups.

Lying at the heart of much of this issue is the budget. In *Presupuesto y control* (Budget and Oversight), Argentine economist Humberto Petrei takes a detailed look at the budget process in six Latin American and seven industrialized countries. He concludes that budgets in Latin America for the most part are focused on inputs, an approach that must be replaced by programs that emphasize outputs and are oriented to providing goods and services.

An English edition of *Presupuesto y control* will appear later this year.

For information on ordering the above books, please call the IDB Bookstore at 202-623-1753, or order through e-mail at IDB-books@iadb.org.

THE BANK IN ACTION



DAVID MANGURIAN—IDB

Any questions? Taxpayer assistance plazas in Lima help more than 1,500 people daily.

Peru doubles tax revenues

How a tax agency got respect by getting tough

By DAVID MANGURIAN

A DEVELOPMENT PROJECT IS USUALLY CONSIDERED successful when it returns 10–12 percent annually. By this standard, the IDB-financed tax modernization program in Peru is way off the charts.

Since the program began in 1991, that country's tax revenues increased from 4.9 percent of GDP to 14 percent. Income tax returns filed have jumped from 200,000 to 630,000 last year, and total revenues are up a whopping $5 billion, more than double 1991 revenues. The cost of the program to date: a paltry $7.2 million.

In achieving these results, the IDB program had a partner in the International Monetary Fund, which set revenue targets, and in the Peruvian government, which strongly supported the changes both institutions were recommending, according to Luisa Rains, chief of the IDB's Fiscal Division.

One key aim of the program was improved tax collection. The system was simplified, reducing the number of taxes collected from 180 to just five. Every taxpayer was given a single identification number. More than 1,100 employees of SUNAT, the national tax administration, received training. All employees had to take an ethics seminar, and salaries were raised from an average of $50 a month to more than $890 a month.

Before 1991 the government offered virtually no taxpayer assistance. SUNAT has since opened seven large taxpayer assistance "plazas" in Lima and other cities and 15 smaller centers in towns.

Another objective was to crack down hard on tax evaders. Last year alone, SUNAT temporarily closed more than 11,000 businesses for not complying with the tax code.

In return for getting tough, SUNAT got respect. In a 1995 poll on corruption in Peruvian government agencies, only 1.3 percent of the respondents said they considered SUNAT corrupt. A 1997 poll ranked SUNAT as the "most efficient" of all public and private Peruvian institutions.

Since 1988, the IDB has provided $750 million for tax modernization programs in 21 countries. "The programs don't just help countries increase revenues," says the IDB's Rains. "They produce sustainable revenues that make it possible for governments to improve budgeting and planning and achieve their development goals."

North-south trade in greenhouse gases

LATIN AMERICAN COUNTRIES COULD PLAY A KEY role in the global efforts to mitigate "greenhouse gas" emissions, stem global warming and contribute to their own long-term economic growth by moving ahead on a Clean Development Mechanism (CDM) initiative, according to Christiana Figueres, executive director of the Washington-based Center for Sustainable Development in the Americas.

Carbon to go on sale

The CDM, scheduled to start operations in the year 2000, was endorsed by the G-77 group of developing countries at the Third Conference of the Parties to the Framework Convention on Climate Change held in December in Kyoto, Japan, which Figueres attended as a Costa Rican delegate.

As conceived by its original sponsors, Brazil and Costa Rica, the CDM would serve as an international mechanism to transact "decarbonization services" between industrialized countries that produce most of the carbon dioxide and developing nations that can help to greatly reduce those noxious emissions.

Latin America could furnish such services in several ways. It could cut its own emissions of greenhouse gases by resorting to renewable energy generation or improving its energy efficiency, or it could "sequester" carbon by improving land use methods.

Through photosynthesis, one hectare of new forest "sinks," or retains, an average of one ton of carbon a year, equivalent to 3.67 tons of carbon dioxide.

Costa Rica has already received offers from industrialized countries to buy two million of the 16 million tons of carbon reduction it has certified, Figueres told IDB staffers at a briefing held at the Bank in January. Prices range from $15 to $20 a ton.

At the same time, the creation of a market for decarbonization services would offer an economic incentive for developing countries to opt for environmentally friendly technologies and land use methods, Figueres added.

Under the protocol adopted in Kyoto, industrialized countries are legally bound to reduce carbon emissions by 5.2 percent below their 1990 levels by the 2008–2012 period. Developing nations, which generate far less greenhouse gases, agreed to no such commitments.

As most rich countries will not be able to fully comply with their national or regional targets within the agreed timetable, the CDM would allow their industries to offset excess emissions by purchasing decarbonization services from developing nations.

The challenge for Latin American nations—which are neighbors of the world's largest source of greenhouse gases, the United States—will be to ensure that all the procedures of the CDM are ready to go by the end of the century, Figueres said.

The region will have a chance to address those issues at a fourth conference on climate change due to be held in November in Buenos Aires, Argentina.

—By Peter Bate

For further information on this subject, see the website run by the Intergovernmental Panel on Climate Change at www.ipec.ch.

Asian crisis: who's fault?

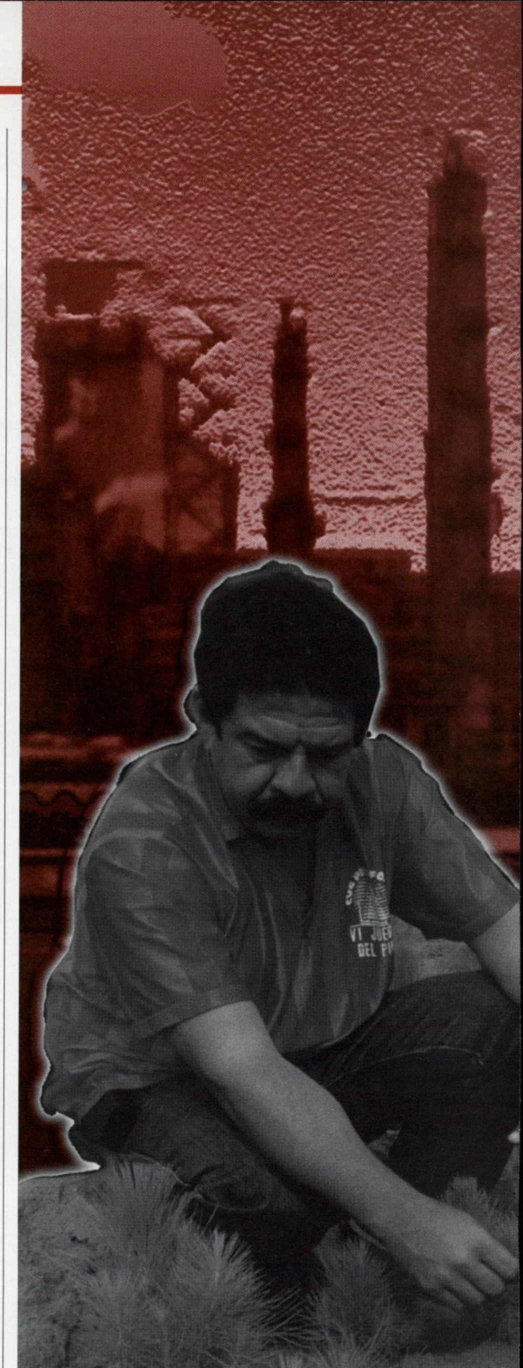
It began with the banks. According to Rudi Dornbusch, an outspoken economist and professor at the Massachusetts Institute of Technology, the Asian financial crisis can be traced to three basic errors committed by foreign and domestic banks in the region.

Three basic mistakes

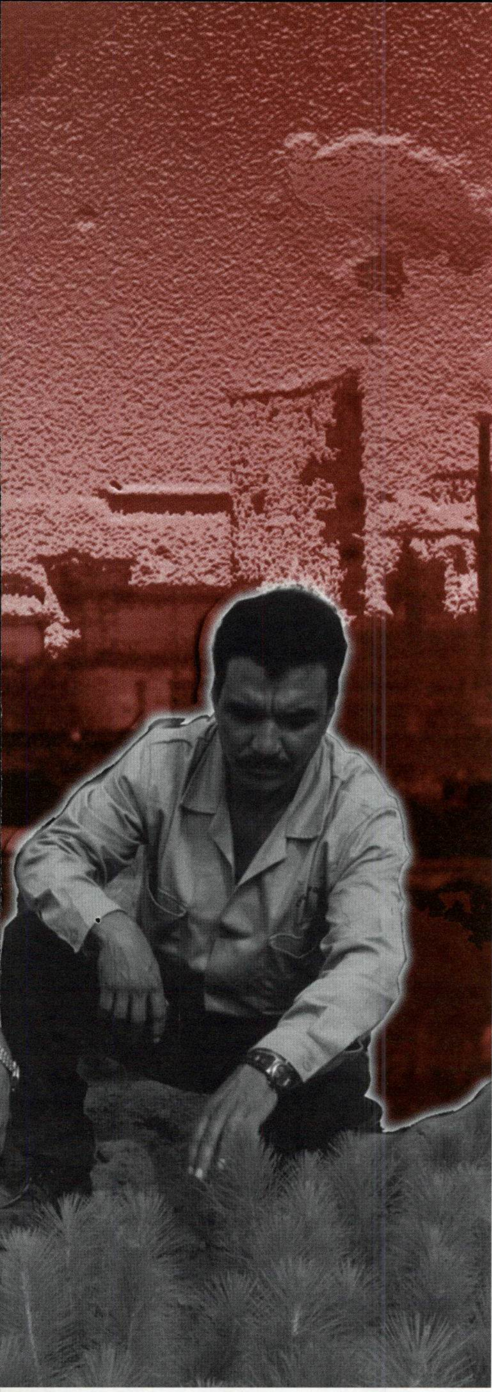
First, they lent too much to ambitious real estate projects, such as commercial office towers, contributing to a glut that undercut expected profits. Second, the banks lent too much to companies owned by government officials and their friends, willingly disregarding serious problems in many such companies. Third, they made too many short-term loans in foreign currencies (usually U.S. dollars), making borrowers extremely vulnerable to any devaluation in the local currency (which is exchanged for dollars in order to repay the loans).

Combined, these three excesses have always created conditions that "can kill banks very quickly" in an economic downturn, according to Dornbusch, who spoke to IDB officials at the Bank's Washington, D.C., headquarters last January. Dornbusch said such mistakes are hardly unique to Asia or to the developing world in general. In fact, almost identical errors were behind several major financial crises in the United States in Europe over the last 20 years.

Why didn't investors and corporations correct the problems in time to avert the crisis? According to Dornbusch, the fault lies partly with Western banks and investors who took far too many risks in Asia. Faced with such eager lenders, many Asian companies reasoned "They are giving us the money, so we must be O.K.," Dornbusch said. Thus, western banks actually contributed to the false sense of confidence that allowed debt to reach dangerous levels. But even greater blame rests with government regulators who oversee banks in Asia, since they knew ex-



DELICATE BALANCE: Planting new forests help



ve greenhouse gases from the atmosphere.

actly how vulnerable domestic financial systems had become but failed to impose tighter restrictions on lending.

In this regard, Dornbusch believes the Asian crisis has clear lessons for Latin America. Although he said banks in the region's largest countries are generally in better shape than their Asian counterparts were last October, he warned that the region's bank regulators are being far too lax. "You would think that much more care would be taken in Latin America [after the Mexican peso crisis of 1995]," he said.

He urged the region's bank regulators to conduct tough hypothetical "stress tests" of local financial systems in order to identify weaknesses and impose appropriate safeguards.

The fine art of spreading risk

It took a singular coalition to fund power project

IF THE LOGISTICS OF BUILDING THE AGUAYTIA power complex in the Peruvian jungle were daunting (see cover story), the challenge of financing the project was downright frightful.

Aguaytía's lead developer, U.S.-based Maple Gas Corp., needed $254 million to get the venture up and running. But the proposal they began shopping around five years ago lacked some of the most basic safeguards demanded by investors in long-term, high-risk infrastructure projects.

First, it was a "nonrecourse" project, meaning that the Peruvian government did not offer any financial guarantees or protections in the event of trouble. Second, electricity projects typically entice investors by securing "future purchase agreements" from governments or local companies that guarantee a predictable revenue stream. Aguaytía had no such agreements. Instead, the company intended to sell electricity through the national grid on the basis of competitive pricing. "Most lenders won't touch a power project that doesn't have a guaranteed revenue stream," said John Binkley, IDB official currently administering the Aguaytía project. "It's just too much of a risk."

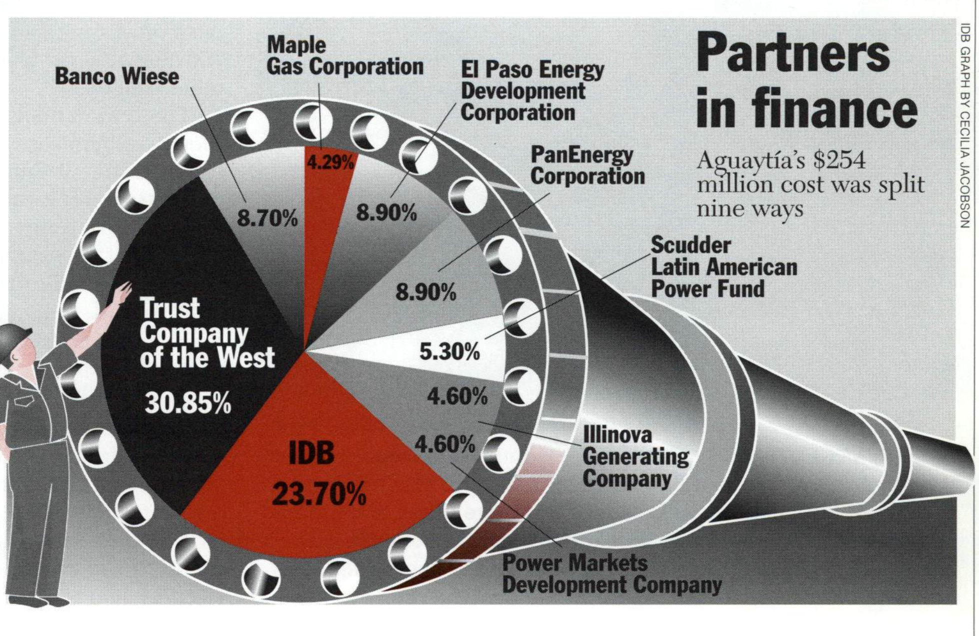
So how did the project get financed? First, Maple turned to other experienced natural gas companies interested in diversifying overseas and showed them that Aguaytía would have tremendous cost advantages in producing electricity, making it very competitive in the Peruvian energy market. Maple ultimately persuaded four U.S. energy companies and an investment fund (see below) to join Maple in putting up $92.8 million in equity capital.

Maple wanted to raise the remaining $160 million as debt financing, and that proved to be trickier. Banco Wiese, a Peruvian lender, offered a $22 million loan. The Trust Company of the West (TCW), a U.S. bank, was also interested, but it wanted to divide the loan burden with a prestigious counterpart lender to add value and experience.

That's where the IDB came in. After it was approached by Maple, the Bank performed a careful evaluation and concluded that the project fit within the IDB's lending priorities for Peru. Ultimately, the Bank agreed to provide a $60 million loan over 12 years, a decision that helped cement TCW's commitment of a $77.5 million loan on similar terms.

"The IDB's role was critical," says Rex Canon, executive vice president of Maple Gas and general manager of Aguaytía Energy del Perú. "I'm not sure there was anyone else we could have brought in who could have leveraged [the rest] of the financing to where we needed to be."

In the end, the financing package was considered so innovative that two European finance publications each named Aguaytía the "1996 Deal of the Year."



IDB GRAPH BY CECILIA JACOBSON

PROJECT UPDATES

EL SALVADOR

New backing for microenterprise

The German government has provided a loan of $8 million Deutsche Marks to Financiera Calpia, an innovative institution in El Salvador that has already provided credit to help 25,000 microentrepreneurs establish and expand businesses.

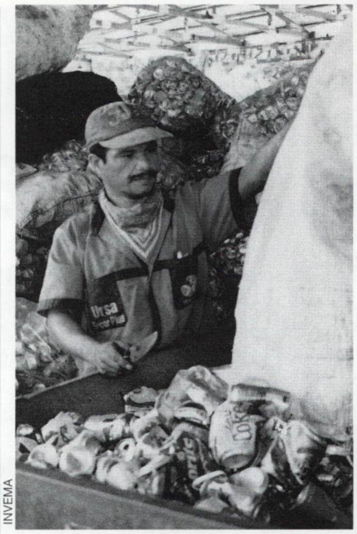
The loan, from Kreditanstalt Fur Wiederaufbau, the German overseas development agency, will be used to provide further credit to microentrepreneurs and small-scale businesspeople throughout the country. Calpia, a regulated microfinance institution, has provided $77 million in loans to small businesses and microentrepreneurs since beginning operations in August 1995. Among its financial backers are the IDB-administered Multilateral Investment Fund and the Central American Bank for Economic Integration, which each own 25 percent of Calpia.

The credit is extended on market terms to finance fixed assets and working capital for businesses that would otherwise have difficulty obtaining loans.

Calpia has a total capitalization of about $5 million.

YURI CORTEZ—IDB

FRUITS, VEGETABLES AND CREDIT. Epifanía Hernández, owner of a small produce stand in San Salvador's Central Market, used a $600 loan from Financiera Calpia to add more kinds of fruits and vegetables to her inventory. Like other Calpia customers, Hernández doesn't have to go far to see her loan officer: Calpia has a branch office right in the center of the bustling marketplace.



INVEMA

One more time around.

COSTA RICA

Funding for eco-friendly firms

Doing well by doing good could be the motto of the Environmental Finance Corporation (CFA after its name in Spanish), Central America's first venture capital fund for sustainable development.

Completing its first full year of operations, the San José, Costa Rica-based organization has made equity investments in five businesses. Among them are a firm that processes wood from tree plantations, an export company that collects aluminum for recycling, a small-scale hydroelectric plant, a manufacturer of plant-derived abrasives for the semi-conductor industry, and a meat processing cooperative that will install a wastewater treatment facility.

The CFA, partially funded by the IDB-administered Multilateral Investment Fund, supports projects in renewable energy, energy efficiency, pollution abatement, ecotourism, recycling, sustainable forestry, agriculture and aquaculture. It is managed by Environmental Enterprises Assistance Fund of Arlington, Virginia, and its subsidiary is based in Costa Rica.

Capitalized at $10 million, the fund provides financing in amounts ranging from $100,000 to $750,000. In nearly all investments, the CFA has been the sole outside source of capital.

NEW PROJECTS

ARGENTINA

Judiciary set for reform

Argentina will carry out a comprehensive program to increase the efficiency, accessibility and independence of its national system of justice.

The program, which will be carried out by the Ministry of Justice with the help of a $10.5 million IDB loan, will seek to resolve long-standing problems that have resulted in a highly negative public perception of justice administration in the country. Recent surveys gauging society's confidence in eight institutions put the judicial system in sixth place, ahead only of political parties and labor unions.

Problems facing the justice system include slowness in processing cases, high congestion, and insufficient public access. Among the causes are weak judicial bodies, ineffective procedural mechanisms, and inadequate use of alternate mechanisms to settle disputes.

The new program will result in the establishment of a nationwide system to record and monitor cases that will be placed on the Internet, a study on how to improve pre-trial mediation, a 70 percent increase in public defenders and counsels, a strategy on crime prevention in the five urban areas with the highest crime rates, and a reduction in delays in judgements and final sentencing from eight months to 30 days.

The program is also expected to lower costs of legal proceedings by introducing new management and administrative systems, strengthening provincial courts and training officials. An information system for penitentiaries will improve access to the legal system by prisoners.

The IDB in recent years has increased its support for judicial reform programs. Last year, in addition to the Argentina program, it financed operations in the Dominican Republic, Ecuador and Panama.

The loan was signed in February in Washington, D.C.

LATEST LOANS

The following operations were approved in recent weeks by the Inter-American Development Bank (IDB), the Inter-American Investment Corporation (IIC) and the Multilateral Investment Fund (MIF).

Argentina
A $10.5 million loan to support reform and modernization of the judicial system. (See article on previous page).

Loans for $1,804,000 and $840,000 in grants to support training for the disabled in the province of Buenos Aires and three projects to benefit small farmers in the provinces of La Rioja and Mendoza.

Belize
A $16 million loan to help upgrade and maintain a 64-km section of the country's Southern Highway, as well as rehabilitate about 176 km of rural feeder roads. The program also addresses complex issues involving environmental protection, land tenure rights and community participation.

Brazil
A $1.75 million nonreimbursable financing to help establish a coastal zone management program for 120 km of coastline between Tamandaré, in the state of Pernambuco, and Paripueira, in the state of Alagoas.

Guyana
A $2.5 million nonreimbursable financing to assist in defining and carrying out policies that will strengthen the country's ability to improve health services.

NEED DETAILS?

To read **press releases** on newly approved projects on the Internet, go to: www.iadb.org/prensa/releases.htm. For related **project documents**, go to: www.iadb.org/english/projects/projects.html. IDB Projects, a monthly listing of planned projects and procurement opportunities, is also on the home page, under "Business Opportunities." For a sample printed copy, call (202) 623-1397, or fax x1403. The Public Information Center can provide **further information** at 202-623-2096, or e-mail PIC@iadb.org.

GAZETTE

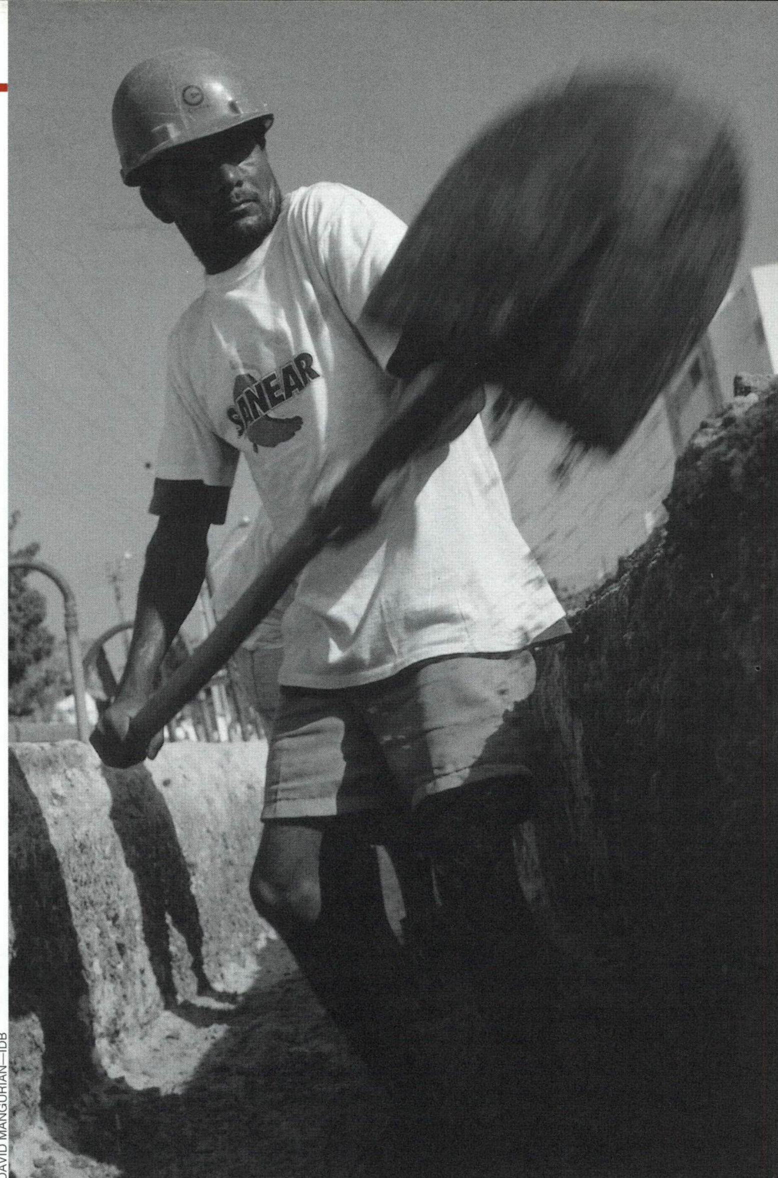
IDB toughens procurement policies

The IDB in January revised policies designed to prevent corrupt practices in procurement and contracts related to Bank-financed projects.

The new language in the Bank's procurement rules and procedures made explicit what had previously been implicit in its policies, and also gives the IDB the right to take the following steps:

- Temporarily or permanently bar firms or individuals from future contracts if they are shown to have been involved in corrupt practices.
- Cancel or accelerate repayment of a loan or grant if there is evidence that the borrower or beneficiary has not taken adequate steps to halt corrupt practices.
- Require that bidding documents include provisions that allow the IDB or its representatives to audit the records of suppliers and contractors participating in IDB-financed projects.
- Accept "no bribery" pledges at the request of borrowing countries that commit contractors to comply with laws prohibiting corrupt practices in the country where the contracting takes place.

The revised policies were adopted in the context of increased efforts by governments and multilateral institutions to combat corruption as an integral part of broader efforts to modernize the state and consolidate democratic rule.



DAVID MANGURIAN—IDB

A STRIKE FOR SANITATION. A worker in Fortaleza, in the northeastern Brazilian state of Ceará, helps clear the way for a new sewage line. More than 1,000 km of sewage lines were laid in and around the city as part of a project partly financed with a $199.2 million IDB loan. The project included sewerage services for 148,000 homes and storm drainage for 40 percent of the city.

Bank issues Drachma bond

The IDB issued its first Greek Drachma bond through its Euro Medium-Term Note Program. The 10 billion Drachma ($34.5 million) issue, launched Jan. 20, was priced at 101 percent, pays a 12 percent annual coupon, and matures Feb. 2, 2000. Morgan Stanley was the lead manager of a syndicate of international banks that placed the issue.

IDB announces new loan rates

The IDB changed its lending rates in February on the convertible-currency portion of loans from ordinary capital for the first semester of 1998.

For outstanding balances of currency-pool adjustable rate loans approved after Jan. 1, 1990, the lending rate is 6.62 percent per year in the first half of 1998, compared to 6.59 in the second semester of 1997.

The rate for outstanding balances of adjustable rate loans from the Bank's single currency facility is 6.99 percent for U.S. dollars, 6.36 for German marks, 3 percent for Japanese yen and 4.31 percent for Swiss francs. The Bank's full credit fee, which in most cases is 0.75 percent, will be charged on all signed undisbursed loans during the first semester of 1998, as it was during the second semester of 1997. A full inspection fee of 1 percent will be charged during the first half of 1998, an increase from the 0.85 inspection fee charged during the second half of 1997.

Music with social overtones

Hard work, discipline and community pride

By ROGER HAMILTON

IN A MODEST, UNPAINTED HOUSE IN A WORKing class district in Caracas, Venezuela, a boy practices a trombone as his mother prepares dinner. Throughout the country, in cities, towns, rural hamlets and fishing villages, young people are running through scales, hurrying off to rehearsals and playing to appreciative audiences in schools, parks and concert halls. Venezuela is alive with music and musicians.

It wasn't always like this. Just two decades ago, only the children of the wealthy received education in the arts. Not surprisingly, Venezuela at that time had but one symphony orchestra, and 80 percent of its members were foreigners.

The event that changed Venezuela's orchestral scene forever was the creation in 1975 of a national youth symphony orchestra. Impressed by its initial success, the government provided it with funding through the Ministry of Family Services. The idea has now grown into a network of 60 centers that offer instrumental and choral music instruction to some 57,000 children and adolescents, many of them from poor families.

Convinced of the need to include more youths in the program, the government called on the IDB for financial help. Last November, the Bank approved an $8 million loan to both improve the quality of the choir and orchestra system and increase their coverage. The funds will help improve teaching, strengthen administration, and construct a training center with rehearsal and performance facilities in Caracas.

Musical safety net. Normally thought of as an artistic end in itself, music can also perform a vital service in a society with limited opportunities for social and economic advancement. In Venezuela, the orchestra and choir system functions as a social movement, according to José Antonio Abreu, the system's founder and director.

Studying an instrument and playing in an orchestra has some very practical as well as psychological benefits, he says. For one thing, it requires dedication and discipline, qualities needed for success in school. Although the young musicians must practice and rehearse several hours a day, 96 percent of them have good to excellent school records, according to one study. "They stand out as high achievers thanks to their steady relationship with music," says Abreu.

Playing in an orchestra also teaches teamwork. "An orchestra is a very special society whose purpose is harmony and cooperation," says Abreu. It also demonstrates the values of hard work, since leaders are chosen solely on the basis of ability.

Despite a demanding rehearsal and practice schedule, youths excel at school.

PHOTOS BY WILLIE HEINZ—IDB

Music also strengthens family life, tightening the bonds between the child and parents who must provide the support the young musicians need. And at the community level, music brings together neighbors to celebrate the achievement of local sons and daughters.

Today, members of Venezuela's first youth orchestras play in the country's great regional symphonies. The Anzoátegui State Symphony, for example, is directed by and made up of former Anzoátegui Youth Orchestra members. When not touring or giving concerts, former youth orchestra members teach the new generation.