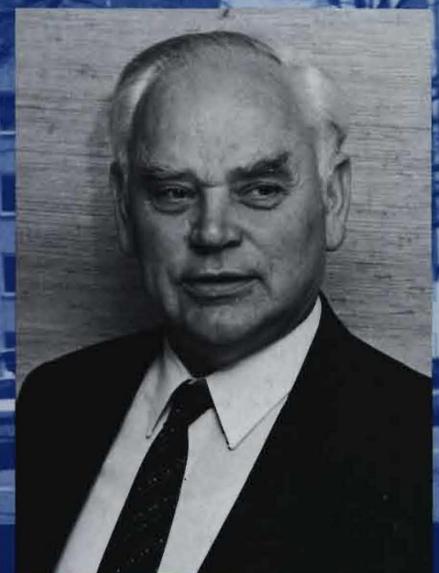
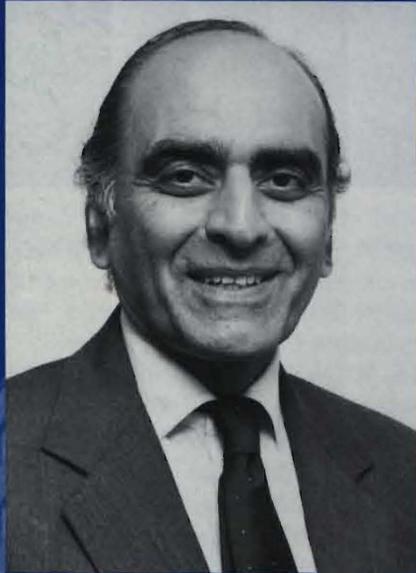


# the Bank's World



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COVER: Mr. Conable and the Senior Vice Presidents—(clockwise, from top right) Ernest Stern, Willi Wapenhans, David Hopper, Moeen Qureshi.

Photos by Michele Iannacci

## The Challenges and Goals Ahead

# The SVPs

by Leandro V. Coronel

**"T**hey are colleagues of outstanding ability and experience in the fields of international economics and development," said Bank President Barber Conable of the four Senior Vice Presidents (SVPs)—Moeen A. Qureshi (Operations), Ernest Stern (Finance), W. David Hopper (Policy, Planning and Research), and Willi A. Wapenhans (Administration). On the shoulders of these men now rests much of the burden of carrying out the mandate of the reorganized institution.

The Bank's reorganization, according to Mr. Conable, "will consolidate a variety of activities that have evolved in the Bank in recent years; it will streamline procedures; strengthen managerial accountability; use administration resources more efficiently; and position the Bank to assist its member nations more creatively and dynamically."

### Challenges Ahead

How do the SVPs intend to carry out their mandate? What are the challenges that lie ahead for the Bank? *The Bank's World* interviewed them to find out.

"The most important challenge is to translate the objectives set by the President into concrete action programs," said Mr. Qureshi, who will take up the Operations post after being Senior Vice President, Finance, since 1980, and after a career in IFC and in the IMF that started in 1958. Mr. Qureshi is from Pakistan.

"Mr. Conable outlined his objectives at the last Annual Meetings," continued Mr. Qureshi. "In particular, he said the Bank must continue to assume a leadership role in economic develop-



ment, in tackling the debt problem, in fighting poverty, and in resolving the severe economic crisis in Africa and in many other developing countries. The Operations Complex must now prepare programs to give substance to these objectives."

Mr. Qureshi also sees his move from Finance to Operations as a personal challenge. Asked how he felt when asked to head the Operations Complex, he said: "So far, my work has involved mobilizing resources for the Bank. Now, the challenge is to make sure those resources are used well on the lending side. It's a constructive challenge, I welcome it."

"The first challenge for the Finance Complex is to successfully conclude an agreement on the increase of the Bank's capital," according to Mr. Stern, SVP, Finance, and from 1980 to 1987 Senior Vice President, Operations. A U.S. national, Mr. Stern has been with the Bank since 1972.

"This [capital increase] is essential for the Bank's expanded role in meeting the challenges facing its borrowers," Mr. Stern added. "Also, we must ensure that the agreements reached for the Eighth Replenishment of IDA [IDA-8] are successfully implemented to maintain continuity in commitment authority between the conclusion of IDA-7 at the end of June this year and the effectiveness of IDA-8."

"The essence of the Bank's reorganization," Mr. Hopper said, "is the decentralization of the Operations Complex, to enable the institution to be



Mr. Conable (right) shares a thought with SVPs (left to right) Wapenhans, Hopper, Stern and Qureshi

more rapidly responsive to the needs of client countries and to be better able to tailor its response to each specific need. Therefore, the challenge for the PPR Complex is to develop a central policy component that is meaningful in the decentralized environment.

"PPR must be closely relevant to Operations. We need to tailor our research to Operational activities and develop a situation where Operations staff would find it useful to bring their concerns to PPR." Mr. Hopper, from Canada, will take up the position of SVP, Policy, Planning and Research, (PPR) after being VP, South Asia Regional Office, since he joined the Bank in 1978.

### Excellent Track Record

"The overriding challenge is to ensure that the excellent track record of Bank service to member countries—established by a highly qualified, dedicated and motivated staff—will continue," Mr. Wapenhans told *The Bank's World*. Mr. Wapenhans, a German national, has been promoted to SVP, Administration, after being Vice President, Europe, Middle East and North Africa Regional Office, from 1984 to 1987. He came to the Bank in 1961 and has held several senior positions in the institution.

"The environment in which we work has changed and will continue to change," Mr. Wapenhans said. "These are trying times in the evolution of the global economy because of the need for adjustment. Similarly, the demands

on our services are also undergoing change. The Bank's reorganization is in many ways designed to recognize these changes.

"The challenge for us in the Administration Complex is to work in a more decentralized structure. It will be a different approach to providing services. But this decentralization will be monitored for consistent application."

What are the SVPs' immediate goals?

"To try to implement the reorganization as quickly as possible," said Mr. Qureshi. "It's a comprehensive reorganization; it involves pain and adjustment, but it holds promise for the future. Now we should get it behind us."

Besides ensuring a successful conclusion of an increase in the Bank's capital and getting IDA-8 under way, Mr. Stern said: "Building on the work which has already been undertaken, we must broaden and deepen our use of innovative capital market instruments." He pointed out that the Bank's borrowing program in FY1988 is expected to reach \$10-11 billion and that this must be achieved in "highly differentiated, sophisticated and volatile markets." Finally, Mr. Stern said, "We must strengthen our capacity to evaluate the impact of our financing decisions on our borrowers and to explicitly take these factors into account in our borrowing and investment programs."

"Bringing together very disparate components in the Bank that did not traditionally work closely together in

the past" is Mr. Hopper's immediate objective. He was referring to the integration of the Economic Research Staff; the Operations Policy Staff; the Planning and Budgeting Department; and other parts of the Bank, including the International Relations Department and the Economic Development Institute, into the PPR Complex. "Interaction among these units was relatively loose in the past. PPR must now come up with a cohesive working whole," said Mr. Hopper.

"But ultimately, our success will depend on people. What you need is leadership that will encourage other leaders and staff in our effort to achieve our goals," Mr. Hopper continued, and indicated he might "borrow a leaf from private industry" by forming "subject-matter" working groups that will carry out the work in PPR.

"Practical ones," Mr. Wapenhans said about his immediate goals. "We need to provide as smooth a transition as possible, especially with Personnel issues. We're putting in place a process that will encourage managers to give staff the opportunity to express preferences, to the extent possible, where they want to go. But, of course, institutional concerns have to come first. Managers will be responsible for selecting their staff; but under the clear understanding that qualifications, merit and performance will be the main criteria.

### Process Well in Hand

"Also, we need to provide the new organizational structure with the facilities it requires. This process is well in hand.

"It's important to have continuity, to keep dislocations as few as possible. The reorganization will establish a sturdy framework that will serve the Bank for a long time to come."

Where do we go from here? Mr. Qureshi sets the tone. In the interview with *The Bank's World*, he said: "I can't think of any other time when the world needed the Bank more—for financial support, policy advice, technical assistance. So let's get on with the business." ■

*Working on the  
Reorganization Study:  
What Was it Like?*

## Task Force Tasks

**S**hock, pleasure, stimulation, mixed feelings. These were some of the reactions of four staff members when asked by Mr. Conable to serve in the Bank reorganization task forces.

"It was quite a shock when Mr. Conable himself called," exclaims Lars Jeurling, Chief of the Financial Policy and Planning Division, Financial Policy and Analysis Department. "But I was also pleased. It was an opportunity to work on the reorganization study, so I prepared myself for it," says Mr. Jeurling, a member of the Policy, Planning and Research Task Force charged with reviewing the Bank's methods for setting macroeconomic and sectoral policies, and matters of institutional planning and budgeting.

### Great Sense of Responsibility

"My feelings were pleasure, honor and a great sense of responsibility," said William Cosgrove, then Director of the Personnel Management Department and recently promoted to Vice President, Personnel.

"I was pleased to know that the President was truly going to tackle the issues. I do believe that many staff feel that various factors—which might be summed up in the word 'bureaucracy'—prevent them from making the contribution of which they feel capable. And I believe we can, as a group, produce much more high-quality work than we have done. The untapped potential is great.

"I felt a great sense of responsibility because I was aware that this was a unique opportunity for the Bank but, at the same time, could disrupt the normal work of the institution and the careers of many individuals," said Mr. Cosgrove, who served as chairman of

the Institutional Services Task Force which reviewed the service levels and use of support functions within the Bank and IFC.

### Mixed Feelings

"I came in with mixed feelings," said Nicholas Hope, also a member of the Policy, Planning and Research Task Force. "I had just moved to the East Asia Projects Industrial Development and Finance Division [as Division Chief]. I knew it would be interesting and stimulating to work in the task force but, at the same time, I felt I would be neglecting my new job.

"I went with some degree of skepticism," confesses Mr. Hope. "In the early stages I was concerned about the potential for disruption. Also, I wasn't sure that we would come up with a better Bank.

"And with all the talk about the need for change, I wasn't sure the staff in general felt this way. Later, I was impressed that many people did indeed think change was necessary; frankly, that was a surprise."

Lars Jeurling adds that his Task Force's staff interviews showed that an "overwhelming number of staff felt change was needed."

When the exercise got under way, what was the experience like? David Bock found it "extremely challenging and stimulating." He is Director of the Financial Policy and Analysis Department and served in the Operations Task Force which dealt with the delivery of services and products to Bank member countries, and the system of responding to borrowers' needs.

"It was both exhausting and invigorating," Mr. Bock said. "Like so many other such efforts in the Bank, our Task

*'We had many heated debates. But we always succeeded in finding consensus.'*

—William Cosgrove

Force was a multicultural, multinational and multidisciplinary group which was able to blend different perspectives and training in order to solve problems and do so in an objective and professional way."

### Heated Debates

Other members had similar comments. "We had many heated debates," revealed Mr. Cosgrove. "But we always succeeded in finding consensus."

"We spent much of the time thinking and debating—both within our Task Force and between Task Forces," according to Mr. Jeurling. "But in the end it was very much a consensus."

"We had very dissimilar people [in our Task Force] and yet our discussions were remarkably amicable," said Mr. Hope. "There were no pronounced disagreements."

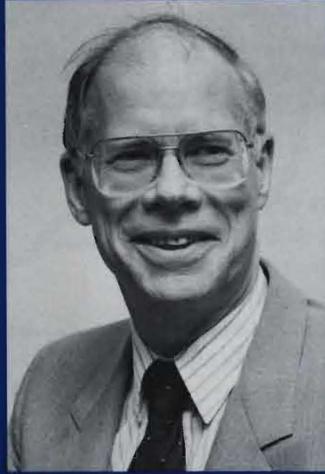
What was the most difficult issue for them?

"The sense that the Bank had lost its way," Nicholas Hope said, "when it came to providing strong leadership in world development. Something had to be done to come up with a structure that would generate new ideas for the institution; and to integrate our operational, support, and policy analysis functions."

For David Bock, who was in the Operations Task Force, it was "achiev-



Lars Jeurling



William Cosgrove



Nicholas Hope



David Bock

ing the right balance between the Country Departments and the Technical Department; in producing the right proportions of tasks and staff." Lars Jeurling struck the same note: "It was important that we ensure that both the economic and technical sides of our operations could thrive in the new structure."

All four men interviewed by *The Bank's World* gave high marks to their fellow task force members. (All task force members were invited to share their thoughts and experiences. But many of them were still immersed in the exercise, some were away, and others had to contend with work that had piled up during this special assignment.)

"I was impressed by the dedication the team members gave to their work, and their consistent balancing of the needs of the institution with a caring for those who would be affected by their recommendations," Mr. Cosgrove said. "And I was impressed by the team members' concern for one another as we went through what was a difficult period for all of us."

Mr. Cosgrove has praise also for support staff who worked with the task forces. "I don't know how the support staff members managed to maintain their equilibrium and sense of humor in the crunch periods, but they did and

because of them we met our deadlines."

"We went through long hours and hard work," Mr. Jeurling told *The Bank's World*, "and contrary to what other staff might have thought, it wasn't glamorous at all. It was hard work."

David Bock added: "Because we were asked to step back from the day-to-day work and reflect on what the Bank was trying to do and how it should go about its mission, I found my own commitment to the institution being strengthened and renewed. The Bank is a strongly 'value driven' organization, even though these values are not formally articulated anywhere. This fact also made the reorganization effort immensely easier, because there was such widespread commitment on the part of Bank managers and staff to rekindling a sense of purpose and enhancing the Bank's effectiveness and efficiency."

"We should now get on with it," Lars Jeurling says. "We have a blueprint for the future, implementation is the key. It's dangerous to sit back and relax, there is more work to be done by every one of us. And, if the Bank is to succeed in playing its role in the world, there's no room for cynicism among us."

What lessons did they learn from their assignment?

"The experience has taught us that the Bank should have the ability to be flexible in adjusting to the future and should use its own internal organization as a strategic tool in accomplishing its objectives," according to David Bock. "And the Bank has to do a better job at replenishing its human capital through a continuing program of training, career planning and focused development of its staff." Lars Jeurling says the main lesson is that "we don't have all the solutions to the problems we face in our work and in serving our clients. However, we must use our skills, experience and judgment to the fullest extent in trying to solve those problems. But we need to be humble in approaching our tasks." Nicholas Hope adds: "We need vision and leadership in responding to our clients' needs."

Asked if any of them had any unusual episodes during their assignment, Mr. Hope said he discovered a common occurrence among many of his colleagues. "I discovered that many of them had been waking up in the middle of the night, mulling over the problems in their assignments. I was having the same experience, but all along I thought I was the only one. It was something of a relief to realize that the excitement and pressure of the job were shared by us all."

— Leandro V. Coronel

*Earthquakes Send Tremors Through Ecuador's Economy*

# A Reconstruction Loan in Record Time

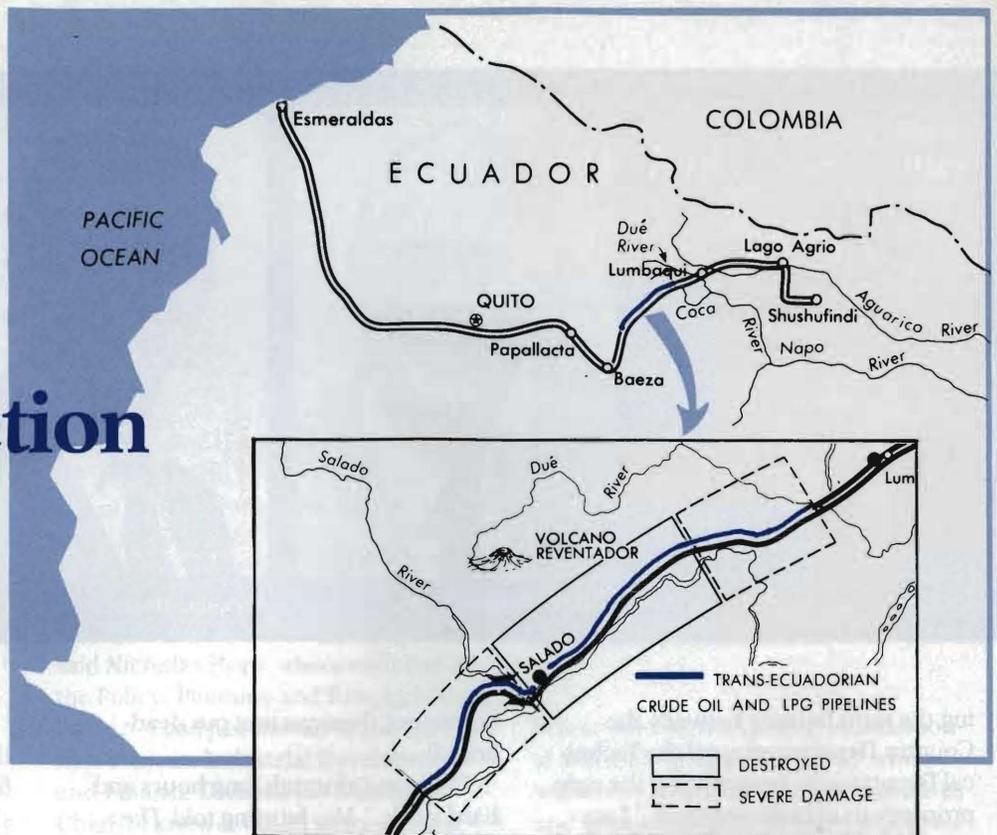
by Marjorie Messiter

When three earthquakes hit Ecuador on March 5 and 6, they ruptured the Trans-Ecuadorian oil pipeline which transports 99% of the country's oil production. The pipeline is the republic's economic lifeline, and had to be repaired quickly to prevent an economic disaster. The country is losing close to \$5 million for each day of lost production.

Oil propelled Ecuador into the middle-income country category (per capita income is \$1,160) in the 1970s and accounts now for 15% of the gross domestic product and about half of the country's public finance revenues and exports.

Ecuador's President Leon Febres Cordero telephoned Bank President Barber Conable for help March 10. Rainer Steckhan, Director, Latin America and Caribbean Programs Department I (LC1), immediately convened coordination meetings with staff from various Bank units and major donors active in Ecuador.

Within two days, pipeline expert Joseph Ristorcelli and highway engineer Sergio Miguel, both consultants and former staff members, were in Ecuador assessing the damage. Within a



week, LC1 Loan Officers Christopher Barham and Katherine Sierra, and mission leader Alain Barbu from the Energy Department assembled in Quito. They were joined a few days later by Tom Hill, Counsel for Ecuador from the Legal Department, and several experts hired by the Energy Department. Robert Picciotto, Director, Latin America and the Caribbean Projects Department, participated in the key discussions with high-level government officials as Mr. Conable's representative.

In less than two months, an \$80 million reconstruction loan was on the table for Board approval.

## Assessing the Damage

The quakes occurred in remote, rugged mountain terrain about 50 miles northeast of Quito, the capital. The first two shocks measured 7 on the Richter Scale, the third 5.5. They followed a month of unusually heavy rainfall and triggered massive landslides and mud flows which not only knocked out a 20-mile section of the oil pipeline but also took out sections of a liquified gas pipeline and a highway running parallel to the oil and gas lines.

One thousand people died and

16,000 were left homeless. Two thousand homeless will have to be resettled in other areas.

The pipeline rupture sent crude oil into the Coca river. Mud flows seven meters high, traveling 12 to 18 miles an hour, carried oil and debris far downstream to the Napo River.

The Napo flows through the Amazon rain forest. A local environmental group, *Fundacion Natura*, has sent scientists to assess the impact on the fragile ecosystem and the 10,000 Amerindian people who depend on the river for their livelihood. The group's study, financed by the U.S. Agency for International Development, is expected by the end of May and will be the basis for an environmental action plan which the Bank will monitor.

The Bank-supported reconstruction project has five objectives: reinstate oil production as soon as possible, prevent long-term damage to production fields, boost production to make up for lost output, minimize environmental damage, and enhance the government's ability to deal with future emergencies in this geologically unstable area.

In the meantime, assistance has come from neighboring Colombia and

Venezuela. Colombia agreed to provide an outlet for oil production by quickly linking Ecuador's oil fields to its own pipeline network through a new 23-mile section. In early May, oil started flowing through Colombia to the coast. From there it is shipped back to the refinery at Esmeraldas on Ecuador's northwestern coast.

### Oil Swaps

Venezuela agreed to an oil swap starting mid-March, providing Ecuador with 12.5 million barrels of crude for domestic use and to meet commitments to the country's major customers. The oil will be repaid in kind over seven months as soon as production is reinstated. Nigeria also agreed to an oil swap of 1.5 million barrels.

"The pipeline reconstruction part is really just a straightforward engineering project," says Mr. Barham, "but it is a special challenge because of the urgency of repair, the remote locale,

the need to choose the best route through difficult terrain, and the adjustments in design which had to take place. The only way to get people and equipment into some parts of the area is by plane or helicopter."

The pipeline is scheduled to be back in operation by early August. To recoup lost production, oil extraction will be gradually increased to about 320,000 barrels a day. Within Ecuador, oil prices are being raised to generate another \$120 million in revenues in 1987 and to curtail consumption.

### Resettling Refugees

Resettling refugees, minimizing the effects on indigenous people, rebuilding housing and basic services, and cleaning up the rivers should be well under way by the end of November. The Bank is actively participating in these activities under the reconstruction loan as well as through an ongoing housing project.

The people who worked on the project were able to keep to the truncated schedule, thanks to good team work all along the line, says Mr. Barham. "The Ecuadorian officials were as hard-driving as the Bank team. It helped, too, having a Department Director [Mr. Picciotto] with a businesslike yet informal style in the field with the mission. While we often worked until 1 a.m., the camaraderie was great.

### Trusted Technical Adviser

"In this crisis, the Bank acted not only as a project financier but also as the government's trusted technical adviser," says Mr. Barham. "This was only possible because of the excellent working relationships which had been built not only with Ecuador's core ministries but also with the technical agencies concerned. When the crisis hit Ecuador, we were ready to move. No other institution I know could have done it."

## The Way We'll Work in the 1990s

# Time to Think about Thinking Computers

by Marjorie Messiter

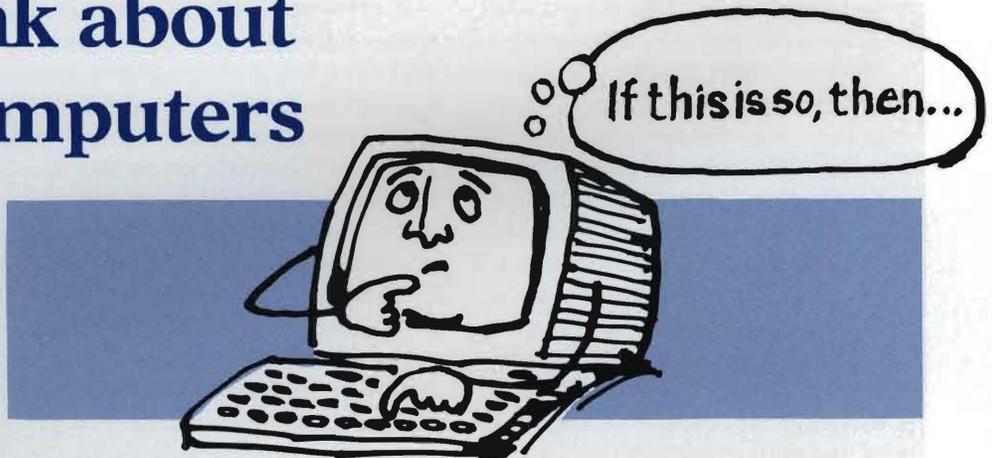
"In computer technology, we are still at the stage of the Wright Brothers' first flight in 1903 or of hand-cranked automobiles in the early 1920s. The real advances in the use of computers are still to come, and it's not too soon to start thinking about how they will affect us and the World Bank."

So said Guido Deboeck at a symposium in April on "Increasing Productivity with Expert Systems" sponsored by

the Planning and Budgeting Department's Institutional and Financial Systems Unit (PBDIF), of which he is Chief. The Leadgroup on Artificial Intelligence, whose members include staff from the Information, Technology and Facilities Department and other Bank departments, cosponsored the

symposium, held in three half-day sessions.

By the mid-1990s, we will make extensive use of artificial intelligence technologies, Mr. Deboeck predicts. Artificial intelligence, or AI, simply means that computers will be able to initiate human reasoning through



"if... then" rules which we use all the time in our own lives. These AI technologies will provide us with more powerful problem-solving tools. All of which should translate into productivity gains—we'll be creating higher-quality products at far lower costs.

This productive power stems from "knowledge-based" systems, as distinguished from "data-based" systems, now being developed under the general discipline of artificial intelligence. They include expert systems (which can simulate the knowledge of a human expert in a particular area), natural-language processing (computers that understand English), robotics, pattern recognition or vision systems, and speech recognition and speech synthesis.

Expert systems are just one part of the artificial intelligence technologies that are now emerging in commercial applications, mainly in large corporations.

Some of the best known examples of expert system applications are computerized diagnostic systems—used for diagnosing medical problems, mechanical difficulties in locomotives or cars, or hardware failures in computers and printers. A computer using an expert system can tell you what or where the problem is.

Banks and financial institutions use expert systems for foreign exchange arbitrage, search of personnel records, telex routing, troubleshooting computer hardware networks, financial planning, and loan application and credit analysis.

At American Express, an expert system assists 300 credit authorizers with access to 13 different databases decide whether to approve credit. Wells Fargo Bank has recently decided to distribute a system called "Mortgage Loan Advisor" to all of its branches in order to enforce consistent credit policies.

In many large organizations, expert systems help to enhance the skills and decision-making of staff and management. "For the last 40 years, we've been employing computers relatively unintelligently," says Mr. Deboeck. "Now tools are available to involve computers in reasoning and solving complex problems."

An expert system can initiate human reasoning by using rules and an inference process mechanism. An expert draws conclusions based on insights and rules of thumb learned through experience. (In computer parlance, these rules of thumb are called heuristics.) When these rules of thumb, which must be focused in a narrow field of knowledge, are combined with data, the computer can draw inferences—"if this condition is met... then that hypothesis is true."

Michael Pollock, a Management Information Analyst in PBDIF, explains

## Desktop Publishing and Computer Diagnostics

Here are two examples of expert systems that are being developed in PBDIF.

Michael Pollock works on systems development in PBDIF. It's a job that is constantly changing and doesn't "fit into a bucket," he says.

At the moment, he's developing an expert system for desktop publishing using GURU software on an IBM workstation. He came up with three versions of a typeset page, with combinations of three and two-column layouts, varying type sizes and other specifications.

With current software, it's possible to typeset a page by computer, but the designer has to give the computer all the specifications. "If a designer coded into an expert system all the rules of good page design he or she had learned, the system could advise you how to lay out the page, just as a designer would if you called on the phone and asked for help. The computer would give the specifications you need, but you would have to take

this information to desktop publishing software to physically produce a page.

"One of the weaknesses of expert systems is that few have interfaces to the outside world. It's conceivable that in the future there will be a link between an expert system and desktop publishing software.

"What expert systems can't do is replace true creativity, common sense or political judgments. It can, however, apply tried and true rules of design to publications.

"One way to measure whether your idea is suitable for an expert system is if an expert can't answer how something is done over the phone, or can't answer a question in half an hour, the problem is likely to be too complex for an expert system to handle."

Ana Dy Tang, also a Management Information Analyst in PBDIF, took three weeks to build an expert system to diagnose problems of the Unit's local area network. The network consists of 14 Apple Macintosh com-

puters and seven IBM PCs linked to two Laser printers using regular telephone lines. Though her system isn't fully developed yet, she thinks it will save time and frustration when something goes wrong in the network.

"When things go wrong—for example, the hard disc is down, the system files are damaged or the power supply board is burned out—they may all show the same symptoms. An expert system can ask you questions and help you find out what the problem actually is. It is like a medical diagnosis. All of this takes about five or ten minutes. Otherwise, someone would have to call Customer Service or the vendor's hotline and wait for help.

"Once the system is set up, somebody without much computer experience could use it for troubleshooting. It also functions as an education tool, instructing users how the system works. Having an expert system around may turn out to be more economical than having an expert around."

***An expert system can perform a recognizable function and is capable of explaining its reasoning on demand. This could be a boon to an institution like ours.***

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heuristic rules this way: "They're all the things you don't learn in school—the value judgments and approximations that give you a workable answer but not necessarily a scientific solution. A heuristic rule would be: if the temperature is above 80 degrees, it's hot. A scientific rule would be: if it's 50 degrees Fahrenheit, then it's 10 degrees Celsius."

The number of rules that can be included in an expert system can vary anywhere from a few to over 10,000; the cost of expert systems applications can likewise range from a few thousand to several thousand dollars.

Expert system software allows a computer to reason inductively from facts or assertions to conclusions (called forward chaining) or deductively from hypotheses or outcomes to inputs or conditions (backward chaining); or through a hybrid of these approaches.

**Allow User to Have a Say**

Unlike spreadsheets, expert systems allow a user to have a say in how they operate because the user can control the way knowledge is used and how the reasoning process is implemented. You can create rules that trigger other rules, and rules that control the reasoning itself. (With Lotus 1-2-3, there is only one way of computing the results of a model—left to right and top to bottom.) Also, some expert system rules might take into account uncertainty or allow the program to make assumptions or draw inferences from unknown values. In short, the expert

system could say "I don't know" or "maybe."

An expert system can perform a recognizable function and is capable of explaining its reasoning on demand. This ability to explain its reasoning process could be a boon to an institution like ours. The expert system could serve as a repository of skills and experience and as a training aid. For example, if an employee who knows how to design a particular type of project leaves the company, the employee takes that experience with him or her. But, if the experience were recorded in a knowledge-based program, the reasoning process would remain with the institution for someone else to use. And, more important, it could be made available to borrowing countries.

"With the use of AI techniques, the products that this institution could deliver in the 1990s may be substantially different from the products and services we deliver today," says Mr. Deboeck.

He suggests that one day much of the data-gathering for project supervision could be done by counterparts in developing countries using expert systems, leaving Bank staff to do more global analyses and assessments of whether programs and projects meet certain requirements.

If knowledge bases were to be developed on project design scheduling, financial analysis, disbursement projections, and procurement, say, for rural development or urban planning, incorporating the expertise of all the disciplines involved, they could be handed

over to borrowers and used by them to significantly improve the project designs they submit.

Can't the same objective be achieved through distribution of staff working papers, publications or training programs?

Not as efficiently, Mr. Deboeck says. Books are a passive form of storing knowledge. The information you want from a book may be in the text, but you have to draw it out, and it may not be in the form you need it. Training has an even more limited reach because teaching takes time, good trainers are scarce, and travel costs and opportunity costs to bring participants and trainers together are high. As a training vehicle, expert systems offer enormous economies of scale.

**Building Knowledge Bases**

Though the payoffs are years away, Mr. Deboeck thinks the time has come to start building knowledge bases using personal computers. "AI is at present at about the same stage as the aerospace industry in the early 1900s. However, while that industry moved slowly over the last 80 years, developments in AI are moving so fast that the stage of supersonic AI applications could be reached by 2000."

The key is to start with a simple project, working on low-risk applications.

E.I. du Pont de Nemours, the chemical company, has used a "let a thousand flowers bloom" approach with small expert systems sprouting throughout the corporation. In less than a year Du Pont employees created more than 300 expert systems at minimal risk—a few days, a few thousand dollars. By 1991 the company expects to have 2,000 expert systems in use, yielding a 10 percent increase in net profits, or approximately \$150 million.

Why not try building an expert system of your own? You'll need a personal computer and a "shell" (expert system software such as VP-Expert which costs less than \$100). The hardest part is developing the knowledge base, but you don't have to know any computer language or be a programmer. ■

## The World Bank's Environmental Action Agenda



Barber Conable

*Bank President Barber B. Conable delivered a major speech earlier this month in which he reaffirmed the institution's leadership role in protecting the global environment. In the speech to the World Resources Institute in Washington, Mr. Conable announced specific steps the Bank is taking in the campaign for a sustainable environment. Here are excerpts:*

**"E**nvironmental neglect," as I said to the Governors of the World Bank seven months ago, "destroys assets vital not just to the quality of life but to life itself." Environmental planning, I would add, can make the most of nature's resources so that human resourcefulness can make the most of the future.

I share the optimism of the recently released report of the World Commission on Environment and Development. With its members I, too, "see . . . the possibility for a new era of economic growth . . . based on policies that sustain and expand the environmental resource base."

My optimism, like theirs, is tempered by caution.

In environmental affairs, as in many others, science has outdistanced government. Yet many of the problems the world has come to recognize as urgent are still beyond man's technical, as well as political, capacities.

We know that we must stop the advance of the deserts. We do not yet know how. We know that population control is essential to environmental protection. But, for all the progress of the past decades in family health and planning, population growth in many of the poorest lands continues to outrun resources.

We know that we must save the tropical rain forests. But neither developing nations nor international institutions have adequate alternatives for hungry people in search of food, and the land to grow it on. And researchers are only beginning to discover the potential of the forests to support settled and wildlife together.

Most broadly, we know of the planet-wide threat to the basic resources of air and water on which the survival of earth depends. But common effort to save the global commons requires a degree of institutional coordination and a

measure of sustained political resolve that man applies more readily in destroying than in preserving life.

In measuring the influence of the World Bank against the environmental challenge, I see how long a road there is to travel from awakened environmental consciousness to effective environmental action.

The Bank has long been at the forefront of that march. Ours was the first international lending institution to set explicit policies on limiting any harmful environmental consequences of development projects it supported. In the early 1970s, for example, a Bank-financed iron ore terminal was built on a Brazilian beach under strict safeguards against pollution and with real respect for the site's natural beauty.

Inevitably, the Bank has also stumbled. For instance, a more recent Brazilian project, known as Polonoreste, was a sobering example of an environmentally sound effort which went wrong. The Bank misread the human, institutional and physical realities of the jungle and the frontier. A road which benefited small farmers also became a highway for logging companies. Protective measures to shelter fragile land and tribal people were carefully planned. They were not, however, executed with enough vigor. In some cases, the dynamics of the frontier got out of control.

### The Bank Must be a Positive Force

Polonoreste teaches many lessons. A basic truth is that ambitious environmental design requires realistic analysis of the enforcement mechanisms in place and in prospect. When mistakes associated with the Polonoreste project became obvious in early 1985, the Bank interrupted payments as a way to encourage important corrective measures. We learned not that we should avoid projects with environmental implications, but rather that where institutional safeguards are weak, the Bank must be a positive force to strengthen them.

Brazil has now made progress in building safeguards for environmental protection. And the Bank is anxious to support Brazil's government in pursuing a National Environmental Program that can become a model for other nations.

For a second basic truth is that development cannot be halted, only directed. And the Bank cannot influence progress from the sidelines. It must be a part of the action. With developing nations, we must go on learning by doing. If the World Bank has been a part of the problem in the past, it can and will be a strong force in finding solutions for the future.

"Nothing so needs reforming," Mark Twain observed, "as other people's habits." The Bank will begin by reforming its own. First, we are creating a top-level Environment Department to help set the direction of Bank policy, planning and research work. It will take the lead in developing strategies to integrate environmental considerations into our overall lending and policy activities.

At the same time, new offices in each of four regional technical departments will take on a dual role. They will function both as environmental watchdogs over Bank-supported projects, and as scouts and advocates for promising advances in resource management. In this process, they will routinely consult with environmental officials in developing countries, and will work to strengthen local institutions. The establishment of these offices will increase significantly the number of staff directly involved in environmental programs.

These organizational changes do not just add layers of interference to head off errors of commission. The added staff will also help define policy and develop initiatives to promote growth and environmental protection together. They will work to ensure that environmental awareness is integral to all the Bank's activities.

### **Continue to Support Major Investments**

The World Bank is a force for development and will remain so. We will continue to support major investments in energy and infrastructure, in industrialization and irrigation.

Our role in such projects, however, will include greater sensitivity to their long-term environmental effects. And we will put new emphasis both on correcting economic policy incentives that promote environmental abuse, and on stimulating the small-scale activities that can combat human and environmental deprivation. Not only will we strengthen the Bank's long-standing policy of scrutinizing development projects for their environmental impact and withholding support for those where safeguards are inadequate, but we will also institutionalize an approach to natural resource management that puts a premium on conservation.

As part of these philosophical and institutional changes, I propose to allocate new resources to a number of new environmental initiatives. In partnership with member countries and with the rest of the development community, we will begin with an urgent, country-by-country assessment of the most severely threatened environments in developing nations. We will promote a continent-wide initiative against the advance of the desert and the destruction of forests in Africa. We will contribute to a global program to support tropical forest conservation. And we will participate in a

cooperative effort by the nations of the Mediterranean and other international agencies to prepare a long-term campaign to protect that sea and its coasts . . .

. . . The World Bank acknowledges its special responsibilities in helping developing nations shape their growth. As an advisor, a source of intellectual as well as financial support, the Bank must be responsive and innovative. And as a lender, it must exert new persuasive influence to integrate better management of natural resources into development planning and investment.

Fortunately, we are far from alone. The Bank can profit from and contribute to the valuable work of our member nations, the expert and dedicated efforts of non-governmental organizations and the wide, continuing experience of other international agencies such as the United Nations Environment Programs.

### **Understanding the Problems and Opportunities**

We must start, however, with better knowledge of the problems and the opportunities we face. To gain that understanding, the Bank will use our added staff resources in a collaborative effort to assess environmental threats in the 30 most vulnerable developing nations. That five-year process will involve not just study but education, and not just in the Bank but also with responsible developing country policymakers.

We must reshape not just the Bank's outlook and activities but also the customs and ingrained attitudes of hundreds of millions of individuals and of their leaders. In doing so we must remember another piece of Mark Twain's wisdom: "Habit is habit, and not to be flung out of the window, but coaxed downstairs a step at a time."

Tropical forests in Africa, Asia and Latin America also demand priority attention . . . The World Bank is the world's largest single source of financing for tropical forest conservation and development. Over the past decade World Bank investments and technical assistance grants in forestry have exceeded one billion dollars. We are ready to do more.

The Bank intends to more than double its annual level of funding for environmentally sound forestry projects from \$138 million this year to \$350 million in fiscal 1989. At the July meeting in Bellagio, Italy, sponsored jointly by the World Resources Institute, the Rockefeller Foundation, the Food and Agriculture Organisation, the United Nations Development Programme and the Bank, we will propose specific strategies for expanding priority work in forest management and reforestation . . .

I have given you only an introduction to the World Bank's environmental action agenda. Events, not speeches, will test its sweep and its impact. But I cannot end these remarks without a note of combined caution and exhortation.

While there is much we can do, no one knows better than I do the actual limits of the Bank's influence on the policies and practices of the developed and developing nations. No

one knows better than you do the power of informed and aroused public opinion to command and redirect the attention of decision makers.

The World Bank needs the help of environmental activists in every nation, in those where organized groups have already proven their effectiveness and in those where consciousness is only now dawning. We need your advice, your

expertise, your pressure and your imagination to make the urgent work of environmental protection a coordinated campaign for a safer, richer, healthier world.

As ours is a common cause—the battle against global poverty is also the fight for a suitable environment—let us be allies for progress on every front. There is a long campaign ahead. We cannot accept anything less than victory. ■

## Alleviating Hunger in the World



Timothy Thahane

*Timothy T. Thahane, Vice President and Secretary, delivered the keynote speech at a conference on world hunger held last month at Morgan State University, Baltimore, Maryland. Here are excerpts:*

**B**etween 340 million and 730 million people in the developing countries do not have sufficient income to obtain enough energy from their diet. This estimate excludes China, for which no data are available.

In relative terms, what this adds up to is that between 9% and 20% of the world population outside China do not have enough to eat. The 9% figure—equivalent to some 340 million men, women and children—is based on satisfaction of the minimum calorie intake needed to prevent serious risks and stunted growth in children. The 20% figure—equivalent to about 730 million people—reflects a calorie intake standard that would allow everyone not only to meet minimum requirements, but also to lead an active working life.

Whatever the statistical niceties, there are at least three quarters of a billion people in the world who do not have enough food and who are, as a result, undernourished by any minimum standard of decency. A world where one person in five or six has insufficient food to support an active life is not a world we can be proud of.

The concentration of this undernourishment in two continents is another facet of this tragedy. About one person in two—both in Sub-Saharan Africa and in South Asia—gets so little energy from their diet that he or she cannot lead the active working life which we take for granted in the industrialized countries.

To commiserate together on these wretched figures won't help any. How we can help is by gaining a better understanding of the links in the chain of world hunger.

At the level of country policy, we need to distinguish two different types of food shortage, or in the current jargon, "food insecurity." First, there is chronic food insecurity, meaning a continuously inadequate diet caused by the inability to acquire food. It affects households that are persistently unable either to buy enough food or to produce their own. Second, there is transitory food insecurity, caused by a temporary decline in a household's access to food. It usually results from instability in food prices or in food production, or from a decline in household incomes.

People who are chronically short of food are not only more vulnerable to disease, they also suffer from a general lack of vigor, alertness and vitality. You could say that the economist's way of measuring this intolerable and dehumanizing state of affairs is in terms of the loss of national income which results from poor nutrition. From one point of view, it may look easy to put it right—after all, a 5 to 10% increase in a country's food supplies would be enough, in most cases, to close blatant malnutrition gaps among the population at large. However, when you come to examine the problem closer up, you often discover that the supply of food is not in itself the only obstacle to food security. In other words, increased food supplies are necessary, but not sufficient, for reducing malnutrition.

This is particularly clear in the context of transitory food insecurity—in its most extreme forms, by the way, we just need a two syllable word to describe it—famine. It is too easy

to jump to the conclusion that it is a lack of food that "causes" famines. Actually, this is not necessarily right, and is certainly an oversimplification. For one thing, wars, floods and crop failures are often an accessory cause. But more subtly, the root of the problem may be a critical loss of income among groups of people who are already very poor. Whether it's a case of food prices going up or household incomes going down, either way very poor people may be squeezed out of the marketplace.

The causes of food insecurity suggest that in the long term it can be tackled only by raising the real income of households so that they can afford to acquire enough food. This must be done in two ways: by giving the people who face chronic food insecurity the opportunity to earn an adequate income, and by ensuring an adequate food supply through domestic production or imports.

In the end, what this really suggests is that there is no substitute for sound economic policy in forestalling famine and, more generally, in raising levels of nutrition to a level where everyone is decently fed and has the energy for a decent day's work. By directing economic development towards the poorest, we can open up job opportunities for them and hence give them the purchasing power they need to buy more food. It is also through sound economic policy that we can foster the kind of environment where agriculture recovers and food output grows in response to national requirements; and where efficient infrastructure for food distribution and marketing exists.

### **Sound Economic Policy**

Finally, it is sound economic policy which in the end generates the resources countries need to import food at world prices rather than to rely on food aid from the international community. Of course, food aid has its place in emergency situations, but it is not any kind of substitute for a national policy framework which promotes growth. I am thinking particularly of growth that benefits the poor and that promotes the development of a healthy rural sector, where production and distribution falls into line with economic social needs.

Let me translate this to the situation in Africa. Essentially it is this: while in recent years there have been dramatic instances of famine resulting from man-made or natural phenomena—Africa has had more than its share of civil war and drought conditions—the underlying malnutrition problem in Africa, as elsewhere, is structural. It reflects ill-directed economic policies, and will be cured only by well-directed policies.

There is certainly one good piece of news from Sub-Saharan Africa, and that is that famine has receded. The drought that began in southern Africa in 1983 went on to affect more than 20 countries and 35 million people by 1985. But fortunately, in both 1985 and 1986, more of Africa had adequate rainfall. The most recent figures for agricultural

production suggest a 3% increase last year, with food production keeping pace with population growth. Only a few countries are expected to need exceptional emergency food aid in 1986/87. That is a dramatic turnaround from a couple of years ago.

What is perhaps even more heartening when we ask whether this improved outlook is going to stick, or on the contrary is just a flash in the pan, is that there is now widespread agreement among African governments on the need for economic and financial reforms, and the direction these reforms should take. Some 25 countries in Sub-Saharan Africa, accounting for about three quarters of Africa's population and gross domestic product, are now implementing major programs of structural reforms, or at any rate are very close to taking up that challenge.

### **Major Achievements in Contemporary History**

The depth of these economic reforms and the persistence of African policymakers in implementing them must rank as major achievements in contemporary history. Reform programs in Africa now cover a wide array of measures designed to devalue real exchange rates, increase agricultural incentives, strengthen budgetary and monetary restraint, reform public enterprises, and reduce the size of public investment programs while improving the allocation of public funds to sound, high-priority programs.

However, in countries undertaking such programs, the institutional and political difficulties, the social costs and the financial requirements to sustain the process are mounting. There are signs that resistance to further reforms is hardening, especially in the face of stagnating or declining per capita consumption.

The price of failure will be high. It is not as if the recent absence of crop failures in Africa—and the widespread recovery in national food supplies—means that the region has turned the corner in all respects. Nothing could be further from the truth. The years 1987 through 1990 are not going to be easy for many African countries. First, prices of most primary export commodities are likely to become even less favorable. Second, export growth is likely to be weaker after its recent recovery from a very low plateau. Third, for some countries, the overhanging debt burden threatens to thwart recovery efforts altogether.

What this means is that sustained recovery in Sub-Saharan Africa will be possible only if there is an appropriate continuation of rigorous adjustment programs which are supported by more foreign aid and by an improved international trading environment. The marked but very belated increase in aid flows to Africa which we have noticed since 1985 must not only be maintained, but must continue to grow. Frankly, Africa's courageous reform and development programs will fall far short of their goals unless the gap in financing requirements needed for sustained growth is met by additional inflows of external assistance. ■

*Trip Hailed as a 'High-level Seminar on the Road'*

## An Irrigation Study Tour, Mexican Style

by Leandro V. Coronel

The visiting Bank staff were convinced that much of what they had seen was worth spreading to other countries. They were touring irrigation projects in northwestern Mexico and were impressed. Now they feel the success of some of the Mexican irrigation schemes can be duplicated in other parts of the world.

The group visited irrigation projects in Mexico Valley and Sonora and Sinaloa States for ten days last March. Led by tour leader Hervé Plusquellec, an Irrigation Engineering Adviser in the Operations Policy Staff (OPS), the visitors consisted of 10 engineers, five economists and one sociologist. They represented the Bank's six Operations regions, the Operations Evaluation Department and OPS. The program included visits to dams; barrages; canals and drains; research centers; and agro-industrial sites for packing fruits and vegetables, such as oranges and tomatoes, for the domestic market and for export to the United States and Canada.

### Irrigation Plays Important Role

Irrigation plays an important role in the economic development of Mexico. One-third of the country's 18 million hectares of cultivated land is irrigated. With six million hectares, the country ranks sixth in the world in the amount of land under irrigation, behind India, China, the United States, the Soviet Union and Pakistan.

Mexico has known irrigation for centuries. When the Spaniards arrived in the country in 1519, the Mexicans



A Mexican official, third from right, briefs Bank staff at a filtration site for drip irrigation in Hermosillo.

were already employing ingenious hydraulic works built to supply water to the cities and irrigation for their crops. Among the best known of the early Mexican irrigation schemes are the "flowering fields" in Xochimilco, remnants of a vast system of floating gardens surrounding the Aztec capital of Tenochtitlan, an island in the middle of the shallow Lake Texcoco, which is now Mexico City.

Five centuries of development resulted in building nearly 2,700 storage and diversion dams and more than 100,000 kilometers of canals and drains. Irrigated agriculture currently accounts for half of the total value of Mexico's agricultural production and 65% of agricultural exports. In 1985, the country's agricultural production had a value of more than \$17 billion and agricultural exports were worth about \$2 billion, or 9% of total exports of \$24 billion. (One

example of irrigation's catalytic role in the Mexican economy was illustrated to the Bank team in Sinaloa State. The 60-kilometer drive between Los Mochis and Guasave, the headquarters of two irrigation districts, was a continuous stretch of agro-industrial sites—produce-packing centers, rice mills and silos, edible oil production sites.)

### Diversified and Intensive

The Bank staff, accompanied by officials of the Ministries of Agriculture and Finance, were taken to sites in the northwest region. Evening seminars, organized to exchange information and experiences with staff of local irrigation districts, broke up close to midnight. The program was diversified and intensive. Soon the guests and their hosts became "integrated," with the guests getting accustomed to the Mexican way of having lunch at 4 p.m. and

dining late at night. The Mexican news media reported the Bank group's visit every day.

A visit to the Tula district, north of Mexico City, enabled the visitors to observe the world's largest irrigation scheme based on the use of waste water. The scheme grew out of the need to dispose of Mexico City's waste water and of the farmers' interest in intensifying agricultural production. The visit also provided an opportunity to see one of the country's 11,000 archeological sites. Tula is said to be the capital of the Toltecs who built the majestic Atlantis statues.

### **Close Cooperation**

Among the Bank group's observations was the close cooperation among irrigation districts, farmers, agro-industries and research centers. The group also noted that farmers in the 220,000-hectare district of Rio Yaqui were fully in charge of the operation and maintenance of the irrigation system except for two main canals. "The farmers pay irrigation service fees, based on actual consumption, to their water user associations to cover operation and maintenance costs," says Arturo Cornejo, Project Officer in the Latin America and Caribbean Region. "Water is supplied only to farmers who keep their water accounts current. This way the operation and maintenance costs of the distribution system are fully recovered from the users. While these fees don't cover investment costs, this is a step in the right direction as far as cost-recovery is concerned, particularly when compared with many irrigation projects in other parts of the world."

According to Mr. Plusquellec, the Rio Yaqui project—with nearly 100 water user associations for areas ranging from 70 to 7,500 hectares—is virtually unique. It is a successful case of farmer participation in large-scale projects in Bank borrowing countries and should be publicized internationally. The possibility is being explored of organizing short-term visits to Mexico to train staff of irrigation agencies in other Bank member countries.

## ***This kind of study tour gives Bank engineers an opportunity to see how irrigation issues are approached and resolved in another region.***

Mr. Plusquellec believes that the Bank group's trip also has a beneficial effect for Bank engineers. This kind of study tour gives them an opportunity to see how irrigation issues are approached and resolved in another region. "There is a great opportunity for cross-fertilization," says Mr. Plusquellec.

Lang Seng Tay, an Irrigation Engineer in the East Asia and Pacific Projects Department, agrees that Mexico is a good place for other developing country irrigation officials to visit. "Mexico has done well in irrigation," he said. But he noted that compared to his country assignment, China, where farmers own small land holdings, many Mexican farmers in the northwest own large, mechanized farms. "The situation in northwestern Mexico is not typical of most developing countries. But the study tour was a good continuing education for me," said Mr. Tay who was visiting Mexico for the first time.

Jagdish Srivastava, a counterpart of Mr. Tay's in the South Asia Region, was impressed by the Mexican projects, particularly their water distribution and control systems. "The tour gave us a good opportunity to observe techniques in distribution and control," he said.

Michael Cernea, Sociology Adviser in OPS, said: "It was professionally

rewarding for a sociologist to be out in the field together with a group of high-powered Bank engineers and economists. I felt that the professional exchanges between us, while observing and commenting upon the Mexican irrigation systems, worked out to everybody's learning benefit. We were all able to discuss, in particular, how the technical infrastructure of irrigation is imbedded in the social fabric of rural communities. Not too long ago, some Bank irrigation projects tended to be concerned only with the physical side of projects. We often underestimated the importance of organizing farmers to operate irrigation systems. In Mexico's Sonora and Sinaloa States, they've managed increasingly to link the technical infrastructure to the social structure. The Bank should promote an increased role for water users' organizations in irrigation projects throughout the developing world."

### **Considerable Interest**

"We're rewriting our guidelines for cost recovery in irrigation, and the Mexican experience is of considerable interest," said Trent Bertrand, Chief of the Economics and Policy Division, Agriculture and Rural Development Department. "Their irrigation projects have many elements that need to be considered in other countries, such as monitoring the delivery of water and the system of charging users for the water."

On the return trip, eight of the Bank staff stopped in Phoenix, Arizona, to visit irrigation projects there. The Arizona projects were "a contrast with those in Mexico," says Mr. Plusquellec, noting the modern water control facilities in that state. "But the water control techniques used in Arizona could serve as models to modernize part of Mexico's irrigation systems and for its future projects."

In the past, Bank irrigation engineers toured projects in the United States. The Mexico trip, only the second tour outside the U.S. after a 1985 visit to Morocco, was, according to one participant, a high-level "seminar on the road." ■

*Recollections of Richard Demuth  
and Robert L. Garner*

## The Bank's First Loan: \$250 Million to France

In May 1947, early in John J. McCloy's term as President, the Bank approved its first loan—\$250 million to finance a portion of France's foreign exchange needs for a long-term modernization program.

With that loan, the Bank was committing more than one-third of its loanable funds held as of June 1, 1947. In 1986 dollars, the loan would be worth approximately \$1.3 billion.

The overall requirements included \$106 million for equipment, \$180 million for coal and petroleum products and \$214 million for raw materials, totaling \$500 million. The equipment included ships, freight cars, trucks, radio and electrical equipment, and coal mining equipment. The list of raw materials consisted of things such as fertilizers, copper, tin, synthetic rubber, animal fats and chemicals.

### Amount Pared in Half

Though the requested loan amount was pared in half, the relative amounts for each category remained the same.

At that time Richard Demuth, who would later head the Technical Assistance and Liaison Staff and who retired in 1973 as Director, Development Services Department and member of the President's Council, was closely involved with the negotiations. Mr. Demuth was then an assistant to John J. McCloy and Vice President Robert L. Garner (later the first President of the International Finance Corporation).

His recollections of the negotiations are taken from an article written for

*Mr. Demuth resides in Bethesda, Maryland, and has on occasion provided legal services to the Staff Association. Mr. Garner died December 13, 1975 at 81.*

the 15th anniversary issue of *Bank Notes*, a precursor of *The Bank's World*, and from an oral history interview conducted in August 1961:

"Nobody knew where to begin. We were inexperienced. We didn't know what kinds of questions to ask, what kind of investigation to make. We hadn't developed the kind of project approach that we worked out later. Our European problems were very different from our development problems at that time, of course, and the whole idea in fact of making national credit-worthiness studies hadn't yet been developed. Just like any other new institution in a new field, at that time we were trying to struggle along finding our way, and we had all these pressures to operate very quickly and make a lot of loans very quickly.

"Mr. McCloy gave the Bank a broad vision and incisive approach that was extremely salutary, and I think he probably made the most, the boldest moves the Bank has ever made in terms of its European reconstruction loans. He realized that the Bank's reputation was at a low ebb and action had to be taken, so he . . . decided to proceed rapidly with a number of European loans. Nobody at that time had any assurance that our loans to Europe would be repaid, but there was a desperate situation there, when Lend-Lease was cut off and the Marshall Plan had not yet been conceived, and the European economy was threatened.

"The problems faced by the new vigorous young team of Messrs. McCloy and Garner, ably backed and supported by Mr. Eugene Black as U.S. Executive Director, in terms of our relations with members, of our own in-

ternal organization, policies and procedures, and, perhaps most of all, of our reputation in the marketplace and the world community at large, were almost overwhelming. But to their everlasting credit, decisions were faced and taken, and gradually, over the months, the Bank took on character, loans were made and bond issues floated, and a momentum was achieved which is with us to this day.

### Requirements Were Immense

"Perhaps the most courageous of the decisions was to make the first reconstruction loans of almost \$500 million to France, the Netherlands, Denmark and Luxembourg. In the winter of 1947, the prospects that Western Europe would achieve economic viability were bleak indeed. The financial requirements were immense and the countries of Western Europe had practically no foreign exchange reserves to help meet them. Indeed, the threat loomed large that the Western European economies would come to a standstill for want of dollars to keep essential food, fuel and raw material imports flowing in. The Bank's reconstruction loans were an emergency measure to meet this situation, pending a more adequate, long-term solution. It took a bit of stretching for the management to conclude that repayment prospects were reasonable; the economic report on France, for example, laid its stress, not on financial resources or specific export prospects, but on the French 'collective will to recover.' The Bank's gamble paid off handsomely, however, for it won the time necessary for the European Recovery Program (the Marshall Plan) to be formulated and put into effect (with considerable assistance from the Bank's staff), with results which are now familiar history."

### The Way it Was

Robert L. Garner, Mr. Demuth's supervisor at the time, came to the Bank as Vice President under John J. McCloy and in 1956 became the President of IFC. He wrote in an autobiography,



France after World War II.

Photo from World Bank Archives

"This Is the Way It Was" (available in the Joint Library):

"During the interim between [Eugene] Meyer's resignation and the employment of Jack McCloy as President, it was natural that personnel of the Bank were in a state of confusion. It had made no loans, the leadership was up in the air and no one could predict whether it had any substantial future . . .

"Of the loan applications, the one from France was for \$500,000,000. It was the only one that had a carefully prepared document which had been developed by Jean Monnet who was probably the outstanding man of France following the war in economic and financial affairs . . .

### Exhaustive Analysis

"Walter Hill, whom Meyer had recruited from his job as one of the important editors of the *London Economist*, was given the task of studying the French program and prepared a fairly exhaustive analysis of it . . . To work out appropriate policies and procedures, I formed a small group whose most important members were Walter Hill, Chester McLain and Dick Demuth.

"We sent Walter Hill to Paris for

talks with Jean Monnet and other French officials regarding their program. We quickly concluded that the needs of France had high priority but that the maximum we would consider for our first loan should be \$250,000,000. I recall one of the first decisions that our group made was that there would be a uniform rate of interest for all borrowers irrespective of their importance or credit standing. We tried to consider all important items and prepared an agenda of the points to be discussed in our negotiations. Within a few weeks we were prepared to open talks with the French and they promptly sent over Wilfred Baumgartner, Governor of the Bank of France, as their negotiator. McCloy conducted one or two of the preliminary discussions but requested that I and my associates carry on the negotiations.

"Baumgartner was a superbly capable financial man and a skillful but difficult negotiator. He was a fine type of French gentleman with a pleasing personality but I realized he was under great tension which was a natural outcome of having lived under the German occupation. With his pride deeply hurt by the military and political disasters through which France had passed,

it was difficult for him to accept our policy to require specific certification as to the precise use to which every dollar of our loan would be applied and the provision of the negative pledge clause; that if France gave security for any other loan, our loan would be covered likewise. There was no precedent for such requirements and he considered that they were a derogation of the dignity of his country. The requirement for specific designation of the use of all the proceeds meant that every contract for purchase of equipment and materials must be submitted and approved by the staff of the Bank against certified bills of the suppliers.

"Although most of the projects involved purchase of industrial and transport equipment, we did include provisions to purchase a moderate amount of coal and oil. Perhaps our most violent controversy arose in regard to this coal. Baumgartner asked if we were insisting that the French officials specify the particular furnace into which every lump of coal was to go. With some amusement, I told him that that would not be necessary but that we did insist on being assured that the coal was supplied to productive enterprises and not used for heating Paris night clubs.

### Finally, Loan is Signed

"We agreed to station a staff member in Paris to facilitate the necessary approvals and the system which we set up has been followed consistently by the Bank. Despite all the difficulties, we finally signed the loan in May 1947.

"The only violation we found with regard to the French loan was that a small amount of fuel oil was diverted to the Navy. The value of this diverted oil was immediately repaid to the Bank.

"The negotiation of this loan was certainly a valuable education for me, and I believe at the close of negotiations, Baumgartner and I had a mutual regard as well as respect for each other.

"Once these procedures and conditions were accepted by France, the Bank had little objection from other borrowers."

## Around the Bank



### Courtyard Meeting

Staff members listen to Christopher Redfern, left, Chairman of the Staff Association, discuss the Bank's reorganization at a meeting April 23 at the Main Complex Courtyard.

"Fish-eye" photo by Michele Iannacci



### Close Consultation

Bank President Barber Conable confers with IMF Managing Director Michel Camdessus at the April 10 meeting of the Development Committee. The Committee called on the Bank and the IMF to increase aid for member countries and to expand their support for structural adjustment programs.

Photo by Michele Iannacci

### 'Follies' a Hit with Senior Citizens

Dressed in their Sunday best, their faces bright with expectation, the elderly folk settled to enjoy "Corporate Follies," a special one-and-a-half-hour theatrical revue. The Duke Ellington School of the Arts' 800-seat auditorium was filled to capacity on this Friday, May 1, at 10:30 in the morning.

"Corporate Follies" featured talented volunteers, employees from several private and public business organizations in the Washington area. The free event was held to celebrate National Volunteer Week and Older Americans Month. It was cosponsored by the Community Relations Office in the Information and Public Affairs Department.

Bank and IMF staff Jane Goldfrank, Agustin Alberti, Carl Blackwell, Keith Thomas, Leslie Shneier, Robin Burdick, Roxana E. Patino and Olivia N. Mejia were among the performers.

Rita Criggar, who also directed the recent hit, "How to Succeed in Business Without Really Trying" was at the helm of "Follies."

Donna M. Alvarado, director of ACTION, a U.S. government agency dealing with social problems and volunteerism, presented a plaque signed by

President Reagan, proclaiming May as Older Americans Month, to Yosef Hadar, the Bank's Community Relations Officer. Newscaster J.C. Hayward of WUSA-TV (Channel 9) was the host. A video tape of "Follies" will be shown to senior citizens who were unable to attend the show. — Morallina George



The Alberti Flute Quintet: (left to right) Agustin Alberti, Nancy Zymelman, Keith Thomas, Carl Blackwell and Jane Goldfrank entertain senior citizens.

Photo by Michele Iannacci

# Solo, So High

by Jill Roessner

**A** small, used airplane in good condition costs about \$10,000.

Many people spend at least that much on a car. Maintaining a plane is about as expensive as maintaining an automobile ("I spend more on my Honda Civic," says Jean-Luc Follain, Information Center Supervisor, Records Management Division, Information, Technology and Facilities Department.) So, flying as a hobby, is not restricted to the affluent.

Admittedly, the Bank's Flying Club does not have as many members as, say, the Knitting Club, but that's probably because most of us prefer to remain on terra firma and restrict our activities aloft to being passengers on commercial airlines. But if you have the urge to pilot a small plane, you can join the Bank's Flying Club, take lessons, and, eventually, fly solo. That is why *Bank's World* joined three Bank staff at Hyde Field in Clinton, Maryland, on a wet day last month.

## First Day She Could Fly

Mr. Follain was there because he was the flight instructor. And Al and Cayo Heron (he's in the Energy Department, she's in Personnel) were there because this was the day their daughter, Carol, was scheduled to fly solo. In fact, this was the first day she *could* fly solo—her sixteenth birthday.

There aren't any laws about the age you must be to take flying lessons.

"You need to be big enough to see out of the windshield," observes Mr. Follain. Carol Heron took her first flight instruction when she was 11. But you cannot fly alone until you are 16.

Considering the qualms most parents have when their teenagers first drive a car alone, the Herons were remarkably calm about their daugh-



Jean-Luc Follain and Carol Heron after her solo flight.

Photo by Al Heron

ter's first attempt at flying alone. "We want her to succeed in whatever she wants to do. If she wants to fly, I am scared, but support her one hundred percent." This from Cayo, echoing her husband's sentiments. When you meet Carol, you understand her parents' attitude.

## Another Step Toward Career Goal

Carol Heron exudes confidence. She's an energetic, vibrant young woman, full of enthusiasm. She isn't learning to fly just for a lark; it is another step toward her career goal—to become an astronaut. She went to a flying camp in Cumberland, Maryland, last year and has also attended camp at the Space and Rocket Center in Huntsville, Alabama, where would-be astronauts get a taste of what it's like in space. The young people attend lectures and undergo training at some of the sites where actual astronaut training takes place. They experience weightlessness and other simulated space conditions in a module that pitches and rolls. They can even find out how it feels to take a walk in space. But the training there is still a form of make-believe and "this is more exciting—this is real life," says Carol of her flying lessons with Mr. Follain.

And indeed, it is. Jean-Luc Follain believes that people learn by doing, so, when his pupils are at the controls, they are in control. He would only take over in an emergency, and if this means a rough ride or a bumpy landing, it's all part of learning to fly. He's

taught about 15 Bank staff, including a 63-year-old man.

Carol is one of his youngest students, but her accomplishment is nothing new in the Heron family. She's simply following in the footsteps of her late great-uncle Alfred Dunlap, her paternal grandmother's brother who, at the age of 18, became the youngest transport pilot in the United States. That happened in April 1929.

Cayo Heron has flown with her daughter and Mr. Follain once. It's not an experience she plans to repeat. But Mr. Follain dismisses her fears, pointing out that flying small planes is like sailing small boats. "It's not as comfy as being in a big ocean liner, but just as safe," he claims. "Just think of the air as being like the ocean. . . ."

## Would Like to See Club Expand

Members of the Bank's Flying Club own three planes, and Mr. Follain would like to see the club expand to include other aerial sports such as gliding, hang gliding and ballooning.

If that happens, Carol Heron will probably try them all. She already rides motorcycles, goes scuba diving and skiing. And her interests are not confined to sports; she also plays the piano, guitar and drums. And she's an A student who is sophomore class president, and has just been elected junior class president. This is a young woman who knows what she wants and works to achieve it.

But on this particular day, the weather doesn't cooperate. The rain pours down relentlessly. Visibility is poor; the winds are high. The instructor and his pupil have been flying, but Mr. Follain decides this is not the day for Carol's first solo flight. She accepts his decision with good grace. Everyone is disappointed, but any other decision would have been irresponsible.

Several attempts were made later, but conditions were still not right until, finally, on Saturday, May 2, Carol Heron did make her first solo flight. In a year, when she is 17, she will be eligible to get her pilot's license. And, after that? Not even the sky's the limit.

# You Say Banana, I Say Banano

by John Alvey

*(Welcome to the exciting and ever-changing world of terminology. In the Bank, most of us have to deal with different languages. When we need assistance, we go to the Language Services Division (LSD), General Services Department. How do the experts there go about their work? To give you an idea, we've adapted this article from remarks made by John Alvey, the Bank's Terminologist, at a recent round table discussion at Georgetown University.)*

**T**echnically speaking, the Bank, unlike most of the United Nations family, has no official language, but English is the working language and virtually all documents are drafted in English. The need for translation has grown over the years. As the former French colonies gained their independence in the 1960s, they called for documents to be made available in French and this was done. The Latin American countries called for Spanish translations, and Arabic was added after the oil crisis in the mid-1970s when Arab countries became both major borrowers and lenders. Chinese was added when China rejoined the Bank in 1981. The Bank's Language Services Division responded to the challenge by bringing in more in-house staff to translate into these languages.

## Wide Range of Subjects

LSD consists of about 40 professionals engaged in translating between English on the one hand and French, Spanish, Arabic and Chinese on the other. LSD also arranges translation into any major language. The texts they are called on to translate cover a wide range of subjects—not only eco-

nomics, finance and administrative matters but also all the sectors in which the Bank carries out lending. It is important that the translations be 100% correct as projects involve many millions of dollars.

Inevitably, even the best and most experienced translator cannot be familiar with all the technical subjects as well as with the various aspects of economics and finance and in-house jargon. This is why the Bank, like many other major organizations, employs a terminologist. The function of the terminologist is to assist the translators (and interpreters) with the technical terminology they encounter in the texts they have to translate.

## Four Main Functions

There are four main functions carried out by the Bank Terminologist. First, he has to assist translators with day-to-day queries. This may involve a technical term in any of the fields covered by the Bank, a local expression, an abbreviation or the name of an organization. Apart from his own resources, he has access to LSD's own library, the various libraries in the Bank and the IMF, a number of remote databases, and other sources. His second main task is to prepare appropriate glossaries and other publications for the translators and interpreters. He also prepares lists of abbreviations from the various French- and Spanish-speaking developing countries and the

titles of ministries in those countries.

The third task is to keep up with new terminological developments. This might be quite straightforward, such as a country changing its name as, for example, the Ivory Coast, which is now officially known as Côte d'Ivoire in English and Spanish as well as in French, or more complex, such as the names of new financial instruments or computer processes. The fourth task is closely related to this and involves the dissemination of this information to the translators and interpreters. The main method used for this is a computerized terminology data bank. This data bank was created on our Wang VS system, using database management software provided by a local software vendor and customized to our needs. As a result, the database has exactly the features we require.

## Soft and Hard Disciplines

There are three special types of problem we have here at the Bank. The first is the problem of dealing with "soft" disciplines, such as economics and finance, where the terminology is less precise. In the "harder" disciplines, such as chemistry, a translator knows that if he comes across a specialist term he does not know, if it exists in his target language there will generally be one hard and fast translation. If you have the term *diphénylméthylènediamine* in French, there is likely to be only one translation into English,

... but who can say

diphénylméthylènediamine



namely diphenylmethylenediamine.

In economics and finance, however, terminology is much less precise. In accounting, for example, each country has its own system. In English, there are the British and American systems. These differ from one another and, of course, differ substantially from the French systems. And each Latin American country has its own system.

### 'Price Waterhoused'

Some French-speaking countries use the French model, while others have been "Price-Waterhoused," influenced by the major American accounting and auditing firms such as Price Waterhouse and Arthur Andersen, so that they use a gallicized English. The same applies in Latin America where the U.S. influence is even greater. This phenomenon occurs in both corporate and national accounts. Part of the problem is that each national system has evolved in its own way, and though there have been some efforts to unify them, they have not always worked.

A prime example in this context is the term "equity." Apart from its legal meaning, equity has various meanings in English. According to Kohler's Accounting Dictionary, it can mean "any right or claim to assets," "an interest in property or in a business" or "common stock plus retained earnings." In practice, it is often used as a synonym for "capital" (which, in turn, has several meanings) or "capital stock" or "net worth" (also known as "stockholders' equity") or "owners' equity." And these are just the meanings in American English! In short, if you see the word "equity" in a text, you have to be careful as to its exact meaning if no definition is given.

### Much More Precise

French is much more precise, making a very clear difference between *fonds propres*, which is basically capital stock plus reserves; *capital social*, which is capital stock; *valeur nette*, which is net worth; *capitaux permanents*, which is owners' equity plus medium- and long-term debt; *prise de participation*; *patrimoine* and so on.

You may think that some of these are so similar that it makes little difference and, in some cases, you may be right, but when you are dealing with sums in the millions of dollars, as we frequently are, it can make a lot of difference, often the difference between making a loan worthwhile and not.

In some cases, international agreement has reduced the problem. For example, the French (though not all the African countries) have abandoned the concept of *production intérieure brute* in favor of the Anglo-American concept of gross domestic product (*produit intérieur brut*). (Gross domestic product includes government and household wages and salaries, which *production intérieure brute*—which has no English equivalent—does not.)

### Having no Equivalent

This leads to the second problem, that of English terms having no equivalent in French and Spanish. In many fields, the English-speaking world, particularly the U.S., leads the way and, whether we like it or not, in many fields, such as computers, terms are coined first in English and then translated into other languages or, as often occurs, left in English.



The same holds true in finance. The main international financial markets are New York, London and Tokyo. The first two, of course, use English exclusively, while the third uses English a great deal. The English they use is of-

## Terminology Data Banks

Terminology data banks are in use throughout the world, and the Language Services Division (LSD) is linked directly to some of the largest. LSD's own data bank is unlike those of other organizations in that the translators not only have direct access to it from their own terminals but can themselves enter terms into the bank as well. The data bank is stored on the Division's Wang system and currently contains some 18,000 terms. Unknowingly, many Bank staff have contributed to the data bank by answering questions on translations they have requested from LSD.

The data bank consists of database management system (DBMS) software, purchased from a local software firm, customized to meet LSD's needs. It's very simple and straightforward and, being menu-driven, offers a list of options which appear on the screen. The operator does not have to memorize any codes. Translators can enter and search for terms and abbreviations in English, French, Spanish and Portuguese. They can restrict their search by using a subject classification and can also search for part of a word, for example, "reali" which could give them "realise," "realize," "realization," "reality," "realistic," and so on.

The DBMS software comes with language that enables the Terminologist to write special programs. Programs allow him to produce bilingual or trilingual glossaries in a chosen subject field (or a combination of two fields, such as rice and pests) in the form of an alphabetical listing by language, listings of abbreviations by country, a printout of new terms entered into the system; a list of terms entered by the translators that have not been checked by the Terminologist, and many others. A number of these glossaries have appeared as Bank publications; those available to staff are announced in the *Weekly Bulletin*.

ten very inventive. Bonds from these countries are often named after what are seen as key features of these countries. American bonds are called Yankee bonds, British ones Bulldog bonds while the Japanese have Samurai and Sushi bonds. Names are frequently invented from acronyms, so that WINGS and TIGRS and CATS abound in the financial markets. Ask a French investment banker what he calls "financial futures" or "securitization" and he will tell you *les financial futures* or *la securitisation*. This has even led to pseudo-French words like *swapper* (from swap) and the use of English words like *le spread* when there is a perfectly good French word (*marge*).

### Non-standard French and Spanish

Finally, there is the problem of non-standard use of French and Spanish. As far as the French are concerned there is only one French and that is the French sanctioned by the *Académie Française*. We have few dealings with other French-speaking industrial countries, though we do make use of Canadian terminology (which, incidentally, often tends to be more purist than the terminology used in France). Most of the former French colonies (and former Belgian colonies) tend to follow the French of France.



The problem is much more acute in Spanish where each country has its own terminology and does not look to Spain to set the lead. For example, *peanut* (or groundnut) has three Spanish names—*cacahuete* in Spain, *cacahuate* in Mexico and *mani* in the rest of Latin America. The problem of terminology becomes particularly acute when you are translating a paper which is meant to cover the whole of Latin America—which version of Spanish do you use? The answer is you compromise. For a start, we always use Latin American Spanish rather

than Spanish Spanish, so we say *costo* for cost and never *coste*. For peanuts, it is always *mani* unless we are referring only to Mexico or Spain.

### What About Bananas?

But what about bananas? Some countries use the term *banana*, others *banano* and yet others *plátano*. The whole situation is complicated by the fact that, for some countries, *banano* is just the tree and not the fruit, while for others it is either the fruit or the tree. *Plátano* in some countries refers to what we know as banana, while for others it is used only for the completely separate fruit we know as plantain (a big, green banana-like fruit). Once again we compromise and, unless we are translating a text referring to a specific country that we know uses *banano* or *plátano*, we tend to use *banana*. This problem seems to be prevalent in the fruit and vegetable field—pineapple, potato/sweet potato and other crops. But it also occurs in other areas; for instance, "investor" can be *inversor* or *inversionista*.

These problems will always remain with us, but we hope to lessen their impact by keeping track of them and, by working closely with translators and interpreters, be able to deal with them smoothly and efficiently. ■

## Senior Staff Appointments



**KHURSHID AHMED**, a Pakistani national, was promoted to Chief, Asia Disbursement Division, Loan Department, effective May 1. Mr. Ahmed joined the Bank in 1972 as an Operations Officer, Development Finance Companies Division, Asia Projects Department. In 1973, he was assigned to Latin America and the Caribbean Country Programs Department I, Division 1A, as Loan Officer. In 1975, he joined the Personnel Department, Staff Development Administration Division, as Senior Personnel Officer. In 1978, he was assigned to the East Asia and Pacific Country Programs Department, Division A, as Senior Loan Officer. In 1983, he was promoted to Deputy Chief, Energy Division, East Asia and Pacific Projects Department.



**FAYEZUL H. CHOUDHURY** was promoted to Manager, IFC Accounting Unit, reporting to the Vice President, Finance and Resources Management, effective April 1. Mr. Choudhury, a Bangladeshi national, joined the Bank's Organization Planning Department in 1985 as a Management Consultant. Previously, he was a Senior Manager with Price Waterhouse, and worked with them in Europe and Africa as a chartered accountant and management consultant.



**MICHAEL P. COLLINSON** was appointed Scientific Adviser in the Consultative Group on International Agricultural Research-Secretariat, effective April 1. Mr. Collinson, a U.K. national, was employed by the International Maize and Wheat Improvement Centre (CIMMYT) in 1975 as a regional economist and had spent the last ten years assisting national agricultural research services in Africa in instituting a farming

system-based approach to adaptive agricultural research. Previously, he was an agricultural economist with the Commonwealth Development Corporation (CDC) of the United Kingdom. He had also worked as a consultant on Bank projects in Asia and Africa and has written extensively on farming systems research.



**JOHN W. LOWE** was promoted to Manager, Portfolio Operations Support Unit, IFC, reporting directly to the Vice President, Portfolio Operations, effective May 1. Mr. Lowe, a U.S. national, joined the Bank in 1970 through the Young Professionals Program. In 1972, he became an Investment Officer, Capital Markets Department. He transferred to the Investment Promotion and Special Projects Department in 1974

and, in 1977, to the Department of Investments, Latin America and Caribbean I. Mr. Lowe resigned from the Bank in 1978 to work with the investment banking firm, Lazard Frères, in New York. He rejoined the Bank in 1982 as Senior Financial Analyst, Energy Department.

## Retirees



**WILLEM BUSSINK**, Principal Economist, New Delhi Office, has retired after nearly 15 years in the Bank. Before joining the Bank, Mr. Bussink, a Dutch national, had occupied senior positions in the Dutch Central Planning Office and in Harvard University's Development Advisory Service. During most of his time in the Bank, Mr. Bussink was a Senior Economist in the East Asia Programs Department, concentrating

on macroeconomic and poverty issues and, more recently, on structural adjustment. After completing his tour of duty in the Bank's New Delhi Office, Mr. Bussink is staying on in India, under Dutch auspices, continuing to work on Indian poverty issues which were initiated during his Bank assignment.



**S. CLIFFORD HARDY**, Procurement Adviser, Projects Policy Department, retired May 1 after 28 years of service. He joined the Bank in 1959 as a Highway Engineer and was appointed Highway Division Chief in 1967. In 1972, he joined Central Projects Staff and served as an Engineering Adviser for transportation, construction technology and contracting. Before he joined the Bank, he had worked as a bridge engineer in the

Ministry of Development in Iraq and served as an officer in the British Royal Engineers during World War II. Mr. Hardy, a U.K. national, will remain in Washington working as part-time consultant for the Bank, but plans to devote more time in the future developing and managing his hill farm by Loch Ness in Scotland.

## New Staff Members

### **H. Alaoui-Abdellaoui**

Morocco  
Exec. Director's Asst./EDS/4/16

### **Charles S. Atwood**

United States  
Project Officer/IFC/4/20

### **Marc A. Babin**

France  
Investment Officer/INV/4/20

### **Michael P. Collinson**

United Kingdom  
Scientific Adviser/CGR/4/1

### **Monique Delroisse**

Belgium  
Secretary/IFC/4/6

### **Brigitte Duces**

Belgium  
Mgmt. Systems Spec./VPA/4/1

### **Colette L. El-Hamri**

United States  
Secretary/LOA/4/27

### **Yasuo Fujii**

Japan  
Capital Market Spec./TOK/4/1

### **Youssef S. Fuleihan**

Lebanon  
Agricultural Economist/EMP/4/1

### **Jacques Hallak**

France  
Sr. Education Planner/LCP/4/20

### **Rajagopal S. Iyer**

India  
Management Consultant/OPD/4/8

### **Teresa Kelly**

Philippines  
Secretary/IFC/4/6

### **Maher S. Mahmassani**

Lebanon  
Attorney/LEG/4/13

### **Gisela Minke**

United States  
Secretary/IFC/4/6



**CARLOS F. MENA**, Senior Power Engineer, Energy Division, Western Africa Projects Department, retired April 30. In his 13 years in the Bank, he worked on energy and power projects, the first eight years in Latin America and the Caribbean Region. Before joining the Bank, he had served 20 years as a design engineer and construction manager in the private sector in the United States and Latin America and, for four years, was

a Power Specialist in the Inter-American Development Bank. Mr. Mena, a U.S. national, plans to remain in the Washington area.

### **Angelika R. Muller**

Germany  
Secretary/EMP/4/20

### **Hung Nguyen**

France  
Operations Officer/WAP/4/20

### **Antonio M. Pimenta-Neves**

Brazil  
Sr. Public Affairs Specialist/4/30

### **Jorge Mariano Rebelo**

Canada  
Transport Planner/WAP/4/15

### **Judy Spann**

United States  
Secretary/IFC/4/27

## AnswerLine

The purpose of this column is to answer questions of broad interest concerning the World Bank/IFC's policies and procedures. Because of space limitations, only questions of wide interest can be published. If you have such a question, send it to: AnswerLine, The Bank's World, Room D-839.

\* \* \*

**Question:** In an article in the *The Bank's World*, some time ago, it was stated that the Bank had not found any evidence of pollutants in Bank buildings, despite staff complaints of headaches, nausea, etc. Were these checks carried out in all Bank buildings, despite staff complaints of headaches, nausea, etc. Were they carried out at different times of day (this is important)? Were they carried out at different times of year (this is particularly important in Washington where relatively small quantities of allergenic substances brought in on clothing and shoes can cause serious problems for allergy-sufferers)? And have they carried out tests for all the possible pollutants, such as formaldehyde (a major component of building materials), asbestos (recently found, for example, in a cinema at 21st and Pennsylvania), radon (found in various building materials as well as in the ground), carbon dioxide (excess concentrations build up due to poor ventilation), numerous microorganisms (which breed in heating/air conditioning ducts), dust and suspended particles (allergenic), PCBs,

fluorocarbons and all the other pollutants that can occur in building materials, cabling, cleaning materials? And while we are talking about pollutants, when is the Bank going to follow the U.S. Federal Government and other major organizations and ban smoking in areas open to all staff?

Answer: The Medical Department (MED) performs an annual environmental survey that encompasses all Bank facilities, both owned and leased. The survey work is done throughout the year and is performed primarily during the work day. In addition, food handling areas are monitored quarterly to ensure that there is no bacterial contamination. The survey program is carried out for MED by specialized environmental consultants.

In the latest annual survey, the following potential pollutants and contaminants were monitored: carbon monoxide, total dust, asbestos, lead and bacterial content in drinking water, radon, ozone levels from copy machines, and microbial contamination of humidification systems.

This survey is to acquire baseline data and to identify potential problems systematically *before* they affect someone's health or safety. MED has been performing such surveys for the past five years.

Specific employee complaints that come to the attention of MED are investigated promptly. Remedial action recommended by the consultants is

carried out under the supervision of the Information, Technology and Facilities Department and MED as appropriate. *André Lebrun, M.D., Director, Medical Department*

**Question:** I would like to know when the Bank will take a firm policy of no smoking. I and many others I have spoken to are tired of coughing, sneezing, and getting headaches from the smoking of others in the office. It is quite a large concern since the United States Surgeon General said it's proven that non-smokers can develop serious illness from secondhand smoke. New York State recently passed stern laws about smoking in public areas. The time has come for the Bank to take a stand on this.

**Question:** Is the Bank going to update its no-smoking rules in keeping with the U.S. Federal Government's good example?

Answer: We recently issued an FYI on the smoking issue. As mentioned in that circular, we have been working with the Staff Association and the Personnel Management Department and have conducted a survey of a sample of staff to assess the extent of support for further restrictions on smoking in the Bank. While the Medical Department does not set policy, we will initiate, for Management consideration, an appropriate no-smoking proposal as reflected in the survey. *André Lebrun, M.D., Director, Medical Department*