

Incurable Disease Poses Global Threat

by Raisa Scriabine

See that you don't get it—there is no medicine" is a Swahili translation for AIDS. In any language, AIDS or acquired immunodeficiency syndrome is a deadly and incurable disease.

Since AIDS was first identified in the United States in 1981, much has already been learned about how and why people get the disease. It is transmitted by sexual intercourse, through blood or blood products and by an infected mother to her fetus or newborn. The disease is not spread by non-sexual contact with an infected person or by insects.

"AIDS results from the destruction of white blood cells called T-lymphocytes by the human immunodeficiency virus—HIV," explains Dr. Jeffrey Harris, an epidemiologist who was trained at the Centers for Disease Control and who recently was appointed the AIDS coordinator for the Agency. "With a weakened immune system, the patient becomes susceptible to infections and unusual forms of cancer. HIV can also infect and damage the central nervous system, resulting in dementia, or severe early senility."

In the United States, AIDS initially affected primarily drug users and homosexuals. However, because HIV infection can spread from man to woman and woman to man during sexual intercourse, AIDS poses a growing threat to the heterosexual population. Some 30,000 cases of AIDS, including 1,200 among heterosexuals, have been diagnosed in the

United States, and over 17,000 of these persons have died.

C. Everett Koop, the U.S. surgeon general, noted in a recent report that by 1991 the number of cases is expected to reach 270,000.

However, an estimated 100,000 Americans suffer from a lesser manifestation of HIV infection known as AIDS-related complex (ARC). People with this condition show laboratory evidence of immunodeficiency and symptoms such as swollen glands, fever and weight loss.



Dr. Jeffrey Harris: "In some [developing countries], up to 30% of young adults are infected. If a large number of the AIDS virus-infected persons develop the illness, health facilities will not be able to cope with the volume of demand for treatment."

Most ARC patients will develop AIDS.

Approximately one and a half million Americans are thought to be infected with the HIV virus. Between 10-30% are expected to develop full-blown AIDS within the next five years, with the rate growing at about 5% per year thereafter. Most—some 90%—don't know that they are infected and can spread the disease to others. Once infection occurs—which is detected by a positive HIV antibody test—it lasts for the lifetime of the infected individual.

Globally, the situation is also one of great concern. AIDS cases have been reported in 91 countries. The World Health Organization (WHO) conservatively estimates that 100,000 cases exist. This estimate includes 30,000 in the United States and at least 50,000 in Africa.

"Five to 10 million people are thought to be infected with HIV," Harris says. "As many as 100 million people may be infected in the next five years if current rates of infection continue."

Dr. Jonathan Mann, director of the WHO Special Programme on AIDS, stresses that two major areas of uncertainty are Asia and South America. "If AIDS epidemics occur

in Asia, an even larger number of infected persons and AIDS cases could be expected in the next five years," he says.

In Asia and the Near East, AIDS and HIV infection are still rare, but both the virus and the disease recently have been identified, indicating that AIDS also may become epidemic in these areas.

Harris notes that there are differences in the transmission patterns and manifestations of AIDS and HIV infection in Africa and other areas of the world. While AIDS cases have affected predominantly the homosexual population in the United States, Europe and Latin America, in Africa AIDS has been primarily a heterosexually transmitted disease. In the United States, more than half of the existing AIDS cases are diagnosed with *Pneumocystis carinii* pneumonia. In Africa, the most common symptoms include weight loss and chronic diarrhea. Kaposi's sarcoma, a type of skin cancer, is universally considered the most common malignancy in AIDS cases.

Reports indicate that Central Africa is the area where HIV and AIDS are most common and the

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AID Seeks \$500 Million for African Development

Africa's special problems demand a flexible response, combining smarter economic policies and effective development programs," Administrator Peter McPherson said as he outlined the Reagan Administration's proposed \$500 million Development Fund for Africa in testimony Feb. 24 before the House Foreign Affairs Committee.

McPherson said the aid package consolidates programs for agriculture, health, education, population, child survival and environmental activities in conjunction with economic policy reform and private sector development.

The proposed legislation would reserve funds for Africa, signifying a continued commitment to the continent, according to McPherson. If approved, the aid would be less prone to congressional earmarks and other rigors of the budget process.

The continent of Africa continues to face a host of challenges, including recurrent drought, declining export revenues, weak economic policies and a largely unskilled work force.

Despite Africa's continuing economic difficulties, McPherson said

there has been significant progress in certain areas.

"Life expectancies in Africa have increased in recent years while infant and child mortality rates have declined," he said.

Many African nations are beginning to undertake valuable economic policy reforms that encourage production and exports, particularly in the agricultural area. McPherson pointed out that these countries indicated a commitment to such reforms at a recent session of the U.N. General Assembly.

The United States has helped stimulate much of this progress through the more than \$6 billion it has contributed to Africa in the last six years.

The new proposal reflects not only the significant needs of African nations pursuing economic growth, but also the increasing importance the United States is placing on these nations.

"America has a growing self-interest in Africa from both a humanitarian and strategic point of view, and effective foreign aid to this region is critical," McPherson emphasized.

U.S. Channeling Food Relief to Mozambique

The situation in Mozambique is a political disaster, not a disaster made by Mother Nature, stated Administrator Peter McPherson at a State Department press briefing on the U.S. emergency humanitarian assistance program for Mozambique Feb. 13.

About 3.5 million people in Mozambique now rely on the United States and other donors for food. In addition, the emergency food needs are unknown for another 2.2 million people who live in RENAMO-controlled areas.

The activities of RENAMO, the national resistance movement, have discouraged farmers from working their land.

"Food has not been planted in many places because of the war and distribution has been greatly inhibited," McPherson explained.

McPherson called for a special representative to be appointed by the secretary general of the United Nations to coordinate donor contributions. He also requested a donors meeting to facilitate the efficiency of the relief effort. He said a special representative and a donor meeting were instrumental in the success of the famine relief effort in Ethiopia.

Citing some of the differences between the Ethiopia situation and Mozambique's, McPherson pointed out that the administrative structure in Mozambique is better able to distribute the food than that existing in Ethiopia. He further noted that

Ethiopia was almost entirely a rural problem, while in Mozambique many of those affected live in urban areas. Bringing food aid to cities is easier and less expensive.

"The Mozambique government is very interested in getting food to its people and providing resources, trucks and other help," McPherson asserted.

The United States is planning to provide 150,000 tons of food and other assistance, totaling over \$50 million this year. Of this, 24,000 tons of food already have been delivered, and 62,000 tons have been approved.

This represents one-third of the food requirements for the 3.5 million at risk.

In addition to food, the United States is supplying the transportation for most of that aid as well as the necessary logistics and administrative backstopping for the assistance operation.

Timothy Knight, assistant director for Africa in the Office of U.S. Foreign Disaster Assistance, and Steve Singer, deputy director of the Office of Food for Peace, have traveled to Mozambique to assess the extent of the food shortage and coordinate the U.S. response with Mozambique officials and other international donors.

In addition, U.N. Representative Charles La Muniere arrived in Mozambique Feb. 14 to conduct a food needs assessment on behalf of the United Nations.

Southern Africa Gets New U.S. Commitment

Administrator Peter McPherson last month unveiled a major new U.S. commitment to developing the economic viability of southern Africa. "You can count on the United States to be a partner," he told the Southern Africa Development Coordination Conference (SADCC) in Gaborone, Botswana.

The United States is proposing to increase its total assistance to the region more than \$93 million a year, according to McPherson. He called it "a vote of confidence in the economic future" of the region.

The Agency has asked Congress for \$93 million as the first installment of additional aid to the region over the next 18 months. These funds will be used to purchase locomotives and rolling stock, improve ports and railways and encourage trade and policy reforms.

Some SADCC member nations reportedly had hoped for a greater financial commitment, particularly in light of recent U.S. cutbacks in Africa programs. However, the initiative outlined by McPherson was well-received given previous reluctance to align U.S. policy with SADCC, which includes some countries that espouse socialism. For instance, Angola, Mozambique, Zimbabwe and Tanzania have statist economies, although they encourage Western investment and allow some private enterprise.

Indicating that U.S. interest in government policy reforms had not softened, McPherson counseled, "The engine of growth in southern Africa must be fueled by private investment. Significant growth will take place only if private investors have confidence in the future." To initiate that action, he urged SADCC to invite representatives of the private sector to offer advice on the region's development.

McPherson also underscored the importance of South Africa to the area's economy. He recommended that the group cooperate with the emerging black business community of that country.

The United States is encouraging leadership qualities among blacks in southern Africa, according to McPherson, through direct grants to private organizations, black business groups and community associations in South Africa. Also, black South Africans are being trained at U.S. universities.

"South Africa will remain an important trading partner for most of the members of SADCC," said McPherson. "Strengthening ties between institutions in southern Africa and black business and community leaders in South Africa can help in the transition to a peaceful economic future for this entire region."

"Many changes are under way in South Africa," he said, "in the policy framework, in rehabilitation of transportation and in recognition of the role of the private sector. In such a

climate, southern Africa, with its extraordinary natural and human resources should in normal times become one of the most attractive corners of the world for new investment.

"Solid foundations for balanced economic growth must be laid as soon as possible," McPherson told the group. "It is now time for strong positive measures to support our hopes for this region."

—Roger Noriega

Investigators Release Study on Cameroon

The cause of the Lake Nyos disaster in Cameroon last August that claimed the lives of more than 1,700 people who lived in villages near the lake was summarized in a report released Feb. 11 at a State Department press briefing.

The investigators, a 10-member scientific team sent to study the situation by the Office of U.S. Foreign Disaster Assistance (OFDA), confirmed their earlier findings that the disaster was caused by the sudden release of a carbon dioxide gas cloud from the lake, displacing the normal oxygen in the atmosphere.

It is not known, however, precisely what triggered the sudden release of the carbon dioxide cloud that rapidly blew into populated areas.

Although Lake Nyos occupies a young volcanic crater formed several hundred years ago, there was no evidence of any direct volcanic influence in the lake at the time of the gas release.

The scientists believe that the carbon dioxide released from the lake was derived from molten rock deep within the earth that gradually seeped to the surface. The carbon dioxide then dissolved in underground streams that feed into the lake and surrounding springs. Because Lake Nyos is so deep (680 feet) and is located in a tropical climate, the water in the lake is layered, with little, if any, mixing of the upper and lower levels.

This lack of turnover of the lake water allowed the denser cold bottom layer to become increasingly saturated under pressure with carbon dioxide, resulting in the release of the gas when the equilibrium of the lake was disturbed.

Approximately 3,000 cattle and other animals also were killed in the affected areas. The scientists found no significant damage to vegetation.

This month, international experts and scientific team members will meet in Cameroon to study and suggest ways the government can mitigate possible future dangers at Lake Nyos as well as set up monitoring programs of other potentially dangerous lakes in the region.

—Renee Bafalis

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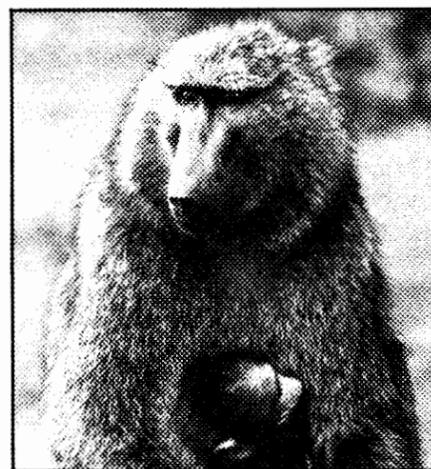


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Cover Photo: AID has taken steps to protect biological diversity by integrating sound natural resource management practices into economic development programs. See story on page 8.

Electricity Bringing New Life to Villagers

by Suzanne Chase

Shortly after dark on a recent weekday night, Profulla Kumar Das and his brother were still at their looms in their home in the village of Pathrail, weaving the brightly colored saris that are the traditional dress of Bangladeshi women and highly prized elsewhere for their intricate workmanship.

Outside, the main street hummed with activity. Under the light of a single bulb dangling from the ceiling in each one-room streetfront shop, merchants plied their trade. Customers congregated in a barber shop while a shoe store nearby did a brisk business. Along the dirt road, villagers browsed at merchandise on display and paused for friendly conversation.

Such a scene would not have been possible a few short years ago when Pathrail, like almost all other villages in Bangladesh, virtually folded at dusk. The advent of electricity that has enabled Das to double his productive hours—and income—and has brought a new way of life to Pathrail and to other villages is the result of a nationwide AID-funded rural electrification program.

Pathrail is served by the Tangail PBS (Palli Bidiut Samity), one of 17

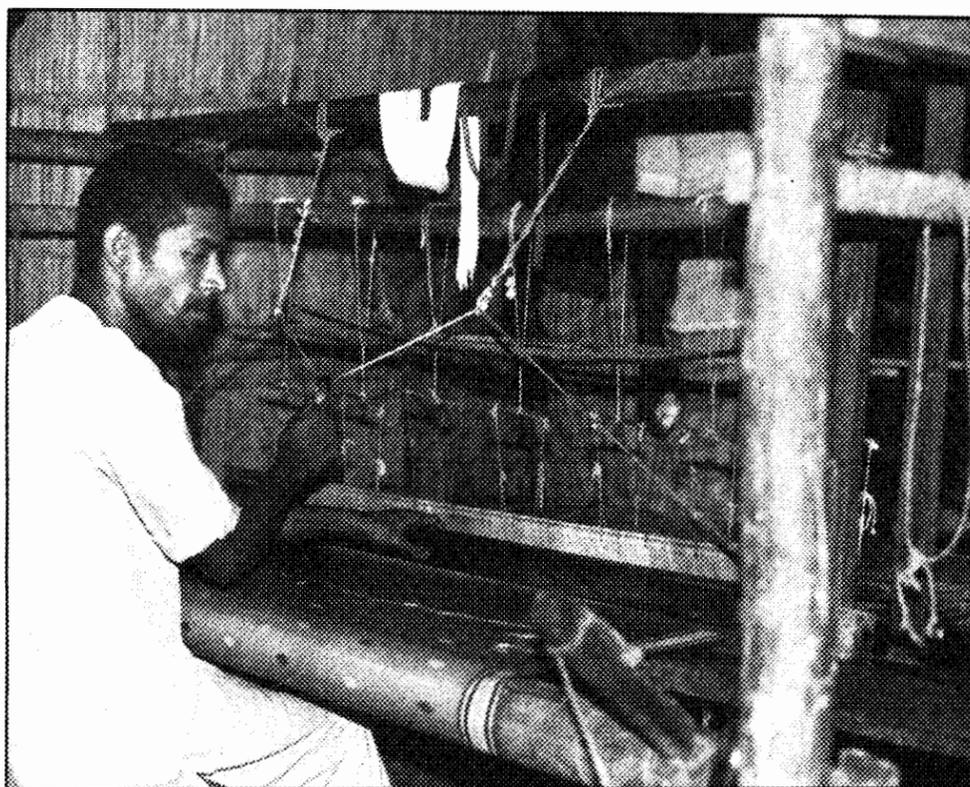
“The goal is to have the rural electric cooperatives totally independent from the government.”

rural electric cooperatives funded by AID through its Rural Electrification (RE) program, now entering its third phase. The program is designed to stimulate agricultural and industrial growth and improve the quality of life in rural Bangladesh by providing electricity through self-sustaining cooperatives modeled on the U.S. rural electric cooperative system.

“The rural electrification program in Bangladesh is considered by many to be one of the most successful AID programs anywhere in the world,” says Mission Director John Westley. “It has an immediate, visible effect in terms of improved standards of living as well as increased productivity—both agricultural and industrial.”

He points out that the program is unusual in that the predominant use of power is for industrial, commercial and irrigation purposes, rather than domestic. “This signifies productive use of energy, which is critical for Bangladesh,” he says.

In addition, the program is having a secondary development impact in such areas as family planning, education and health. “Before electricity was installed, people went to bed within an hour of sunset. Now they are able to stay up later to work and study. Children are going to school in greater numbers, medical offices



AID's Rural Electrification program in Bangladesh has enabled villagers such as Profulla Kumar Das to increase their productive hours and thus their income.

can stay open later, and news and public service announcements concerning family planning, for example, can reach the villagers through radio,” Westley explains.

Rural development is a critical concern for this poverty-stricken nation, where 85% of the more than 100 million people live in rural areas.

“The overall AID program in Bangladesh has three major objectives—reducing population growth, increasing agricultural productivity and expanding rural employment,” says Westley. “RE, which is both an infrastructure and a policy program, addresses these basic concerns.”

In 1976, less than 3% of the rural population had access to electricity. “At that time, the government of Bangladesh decided to extend electricity to rural areas to improve the quality of life and stimulate economic growth through development of agriculture and small-scale industries,” says David Warner, AID project officer.

In support, the mission funded a comprehensive rural electrification master plan, which was developed by the U.S. National Rural Electrification Cooperative Association (NRECA) and adopted by the government of Bangladesh. The plan calls for the electrification of all rural areas in five phases.

“The government realized that Dhaka was growing too fast,” explains Brac Biggers, leader of the NRECA team that provides technical assistance for the project. “They decided to bring industries to the people—not the people to Dhaka. With industry concentrated in the capital, people flood in, and the government has to build more streets, sewers, water systems and housing. From a national standpoint, it is much cheaper to build a rural electrification system to attract industry outside the capital than to build the necessary supporting infrastruc-

ture in Dhaka.”

The rural electrification program is based on the concept of balanced growth through “Area Coverage Rural Electrification” (ACRE). A basic distribution plan is designed to provide a backbone system that can accommodate rapid increases in the number of consumer connections.

“The ACRE concept involves the development of autonomous, member-owned rural electric cooperatives, each of which covers approximately 500 square kilometers. On average, each cooperative will provide electricity to 15,000 to 17,000 consumers,” says Biggers.

The program is designed in overlapping phases for continuity. For the first phase of the program (1978-86), AID provided \$69 million to create 13 rural electric cooperatives. The government of Bangladesh contributed the equivalent of \$20 million in local currency.

“All AID funding is used to finance technical assistance and commodities, such as lines, poles, substations and transformers,” notes Warner.

To launch the program, AID assisted the government in establishing the Rural Electrification Board (REB), a semi-autonomous agency budgeted by the government.

“REB is the executing agency to establish the co-ops and regulates their activities during the initial stages,” says Biggers. “The ultimate goal is to have the PBS totally independent from the government.”

The first rural electric cooperative was electrified in June 1980, six months after construction began, and all 13 co-op areas were electrified by October 1982.

“The success of RE I convinced other donors to support the expansion of the rural electrification effort,” says Warner. In the second phase of the program, the World Bank funded the construction of seven cooperatives; Kuwait paid commodity

costs for eight; and Finland financed one new PBS.

A \$50 million AID grant for RE II (1982-88) financed the construction and development of four new rural electric cooperatives and additional connections in the original 13. AID also agreed to provide technical assistance for the entire rural electrification program.

“The use of one contractor by all donors has been very effective in helping to ensure that the high standards developed by REB are uniformly applied to other donor-funded PBSs,” adds Warner.

The 17 AID-funded cooperatives now provide service to nearly 360,000 households, 24,300 businesses and 6,800 irrigation systems located in more than 4,000 villages.

Each cooperative is governed by a 12-member board of directors, elected annually by the membership. Day-to-day operations are the responsibility of a general manager, who is recruited by the Rural Electrification Board and approved by the cooperative board.

Through the program, NRECA provides training in the United States for REB and cooperative representatives. “We basically had to start from scratch,” says Biggers. “We trained everyone from managers to line installers, repairmen, accountants and clerks.”

The Bangladesh system is patterned after the U.S. rural electrification program. “We don’t build high voltage lines because it requires too much insulation and is too expensive,” says Biggers. Bulk transmission of power at 132,000 volts is reduced to 33,000 volts at substations, then down to 11,000 in rural areas and stepped down to 220 volts for household use.

“Hauling power is less expensive in smaller amounts,” he explains.

Another way cost is reduced is by building single-phase lines for home hook-ups.

At present, the total plant, including lines, transformers, substations and poles, is provided to the cooperative by the Rural Electrification Board as a loan. The cooperative buys power directly from the Power Development Board (PDB), Bangladesh’s national power company, and repays the loan with revenues generated through consumer fees.

Thus, one of the first steps to establish the cooperative system was to convince villagers in each project area of the benefits of rural electrification and get them to agree to pay a small fee to become members of the cooperative.

“This was not an easy task,” says K. Zaman Khan, director of program planning for REB, which organized membership drives in each region. Khan, who led the team of engineers that walked village to village in the area eventually served by Bangladesh’s first rural electric cooperative, the Dhaka PBS, explains, “The people were very skeptical that electricity would actually be installed.”

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Global Threat

From page 1, column 4

situation most critical. Exact estimates on the spread of the disease are hard to come by. Blood screening is still too rare to make accurate projections. Conclusions about mortality may be imprecise because AIDS can simulate malnutrition and can increase vulnerability to tuberculosis, malaria and other common killer diseases.

Still, estimates are made. *Time* magazine reports that 16% of the adult population in Lusaka, Zambia, including 30% of the men, have been exposed to the AIDS virus. In Bangui, Brazzaville, Kampala, Kigali and Kinshasa, 6% to 30% of young adults have been infected with HIV.

Newsweek notes that AIDS devastated the village of Kasensero in

"The human cost of AIDS is staggering."

Uganda, reducing the population from 600 to 150. Many left the village. Some 100 villagers died from what is called "slim disease" there—because one of the most common effects of AIDS is endless diarrhea, literally wasting the body away. Almost 10% of all residents in Bujumbura, Burundi, are thought to carry the virus, even though such projections are officially denied.

Dr. Halfdan Mahler, director general of WHO, notes it is estimated that 10% of pregnant women in Africa test positive for the AIDS virus. Reports show that 20% to 50% of infected pregnant women transmit the infection to their newborns, and up to 5% of babies born in Kinshasa are infected.

The human cost of the disease is staggering. "The tragedy is compounded by the fact that AIDS hits people in the prime of life—in the 19-40 age group," notes Bradshaw Langmaid, deputy assistant administrator for research in the Bureau for Science and Technology and head of AID's working group on the disease. "The loss in terms of the economy and the social structure can be enormous."

In the Zambian copper belt, for example, 68% of the male carriers of AIDS are skilled professionals. The loss of the educated elite in a number of countries can significantly damage prospects for economic growth, stability and progress.

"As the breadwinners in developing nations die, their dependent elderly and children are left to fend for themselves," Langmaid says. "Agriculture could suffer if the number of AIDS-affected farmers grows. In drought-plagued Africa, a decline in food production is an unwelcome prospect."

Productivity in industry also may decline. Some Zairian companies are concerned that they will not be able to sustain their sickness benefits and payments to employees if AIDS continues to expand at current rates.

U.S. figures already indicate the high cost of treatment. The economic cost of caring for victims—many of whom are denied health insurance—is estimated to exceed \$1 billion a year. By 1991, this may grow to \$14 billion a year. Such cost figures fall outside the budgets of many health care facilities in developing countries.

"The problem of AIDS is critical," says Administrator Peter McPherson. "The response to AIDS will require developing countries to divert precious resources that already are stretched to the limit." The cost of AIDS in many countries may take funds that are needed for other government programs in health, family planning and other priority areas.

The spread of the disease also raises complex problems for health care services in developing countries. Harris explains, "In some areas, up to 30% of young adults are infected. If a large number of the AIDS virus-infected persons develop the illness, health facilities will not be able to cope with the volume of demand for treatment." Blood transfusions also become problematic without proper screening. In Zambia, for example, more than 10% of the blood stock is said to be contaminated with the AIDS virus.

Because needles and syringes contaminated with HIV-infected blood can transmit the virus, immunization programs are another area of potential concern. Although immunization programs have not been shown to transmit the virus, AID, UNICEF and WHO have taken steps to prevent the possibility of transmission. AID, for example, has provided funds to ensure adequate supplies of needles, syringes and sterilization equipment. Staff training in sterile techniques also has been upgraded. Additionally, AID is sponsoring research, development and manufacture of a syringe-needle device that is absolutely non-reusable.

The Agency has provided \$2 million to the World Health Organization—the lead agency in developing and coordinating an international AIDS program. WHO will use \$1 million to help create a worldwide surveillance system, encourage behaviors such as condom use to reduce sexual transmission, and promote blood screening to ensure the safety of the world's blood supply. The other \$1 million supports WHO's regional office in Brazzaville, Congo, for surveillance and educational activities in Africa conducted with the assistance of the Atlanta-based Centers for Disease Control.

AID will continue to support and collaborate actively with the WHO program, according to Langmaid. In addition, the Agency will support centrally-funded activities in the areas of public health communications, condom distribution and research. Because of limited resources and other AID priorities, new major bilateral programs aimed specifically at AIDS are not planned at this time.

Funding, manpower, transportation, language and resistance to

Love Carefully!

What EVERYBODY Needs to Know About "Slim" Disease AIDS



Learn the Facts: PROTECT Yourself and Those You Love



Health Education Division
Ministry of Health
Republic of Uganda
PO Box 8, Entebbe

change in lifestyle patterns all affect the impact of public education campaigns against AIDS in Africa. In Uganda, for example, 22 languages are spoken. The anti-AIDS campaign slogan, "Love Carefully," has been translated into only 10.

There is a reluctance on the part of some governments to publicize facts about the prevalence of the dis-

ease for fear of retarding tourism and foreign investment.

Progress, however, is being made, according to Harris. Uganda, Zaire, Kenya and Rwanda are among the nations that have launched educational programs on AIDS.

In Uganda, a nation where the number of AIDS victims doubles every four to six months, a national AIDS committee has been formed to review and monitor the country's strategy to combat the disease. The Agency recently shipped two million condoms to Uganda in response to an urgent request from the government.

Zaire is running a research program involving foreign and national medical specialists. Since 1985, Rwanda has been screening blood with the help of the Rwandan and the Norwegian Red Cross.

The United States is presently spending over \$400 million annually in AIDS-related research and education. Research, for example, has helped identify and isolate the HIV virus. In 1985, a simple blood test for AIDS, the ELISA (enzyme linked immunosorbent assay), was developed and approved. This test, which costs \$2 to \$4, detects antibodies created by white blood cells in response to the AIDS virus. Last year, U.S. scientists also developed azidothymidine (AZT) as a palliative treatment.

Dealing with the potential pandemic proportions of AIDS will require the mobilization of enormous human and financial resources. Until solutions to the problem are found, education on the risks of the disease is vital. Precaution and abstinence are the only present means of prevention.

Scriabine is a former deputy assistant administrator of the Bureau for External Affairs.

AIDS TESTING

The Department of State has approved testing for the HIV virus as a standard part of the Department's medical examination process for foreign service applicants, employees and dependents over the age of 12. Beginning this year, the screening will be conducted every two years as part of the routine physical examination.

Because HIV-infected foreign service personnel in developing countries are at risk of developing AIDS in an environment where adequate medical facilities are not available, all foreign service personnel and dependents found to be infected with HIV will receive a restricted medical clearance only to sites with adequate facilities for and experience in treating AIDS and other illnesses caused by HIV. This effectively excludes developing countries.

Personnel with evidence of immune suppression and/or other symptoms will be

assigned to the United States. Prospective foreign service candidates who test anti-HIV seropositive will not be recommended for employment.

AID adheres to these guidelines, which were set by the State Office of Medical Services (M/MED). At present, there is no mandatory screening for Agency contractors.

HOW TO AVOID AIDS

- Don't have sex with prostitutes, multiple partners or people who have had multiple partners.
- Use condoms if you have sex with multiple partners.
- Insist that any injection you receive is given with a sterile needle and syringe.
- Recognize that unsterilized blood transfusions can carry a high risk of infection. Avoid blood transfusions unless they are absolutely necessary. Insist on receiving screened blood.

Diversity Highlights African Experience

by Nancy Long

Africa is like a kaleidoscope," says Don Miller, AID's representative to Burundi, who has served many years in Africa. "There are roughly 47 countries, and every time you move from one to another, the experiences are remarkably different."

Having served in nine African countries since joining AID as an intern in 1958, Miller evinces the kind of knowledge about the land that comes only from vast personal experience.

A native of New York, Miller earned his bachelor's and master's degrees in international affairs at the State University of New York at Albany. "After graduating," he says, "I taught secondary school for two years and then decided to apply for an intern position with the federal government.

"After I took a series of written and oral tests, a representative of AID phoned and invited me for an interview," he says. "It was hap-

"Looking at Africa as a whole—despite seeing a gloomy picture in terms of macro-economic statistics—there are still many important positive changes that have occurred."

penstance that brought me to AID—a fortunate coincidence because my interests were in international affairs.

"I formally joined the Foreign Service in 1961 and went to Nigeria. This was immediately after Nigerian independence, during AID's large program build-up there. My assignment in Nigeria, my first experience in Africa, exposed me to the mindset, prospects and problems facing the continent," recalls Miller.

"Nigeria was AID's first major country program following the African independence movement. One of the largest countries in Africa and in many ways the most tumultuous in terms of social and political dynamics, Nigeria offered me a chance to work with an eminent group of people."

Reviewing the changes in development he has witnessed in Africa, Miller speaks in broad terms, contrasting Africa's present economic situation with the overall improvement in its standard of living.

"Unfortunately, I've seen some negative changes in recent years," he says. "These were caused by political developments, such as the revolution in Ethiopia in 1974. There has



Representative to Burundi Don Miller: "When I first went to Africa, most of what we consider bare necessities had to be imported from Europe. That is not as true in Africa today."

been economic retrogression as a result of the political changes in that country.

"Looking back at Africa as a whole—despite seeing a gloomy picture in terms of macro-economic statistics—there are still many important positive changes that have occurred."

Continues Miller, "When I first went to Africa, most of what we consider bare necessities had to be imported from Europe—basic consumption items such as meat and milk.

"That is not as true in Africa today," he says. "You can get milk. There are productive poultry farms in almost every country. There also has been a tremendous improvement in the quality of beef and pork.

"Not all of this progress is recorded in economic statistics," he adds. "For instance, food that is produced locally, solely for local markets rather than export, doesn't show up in national statistics."

Although he acknowledges the financial problems of Africa, he says, "The quality of economic life has improved dramatically. There also is no question that literacy and the average life span have increased over the last 20 years.

"It is not uncommon now to see people in Africa living into the upper-40s or even into their 50s. It wasn't like that in the early 1960s," he recalls.

"The educational level of Africans has improved markedly in 25 years," Miller adds. There are new universities in Africa that are producing graduates who are working in their own countries. This benefits the education process as a whole, from the university system down to secondary and primary levels."

This improvement in the quality of life is not only the result of what African governments have done for themselves, Miller says. Efforts of the international community have contributed as well.

"The United States can't take sole credit for these advances. But as an important member of the international community, we are due our share of

the credit," he says.

Miller notes that economic troubles in Africa are the result in part of the fact that consumption has risen.

"Imports are growing at a faster rate than exports. The resulting imbalance makes it more difficult for governments to pay off their loans for large capital projects," he explains.

However, he adds, without foreign assistance from AID and other donors, the situation would certainly be worse.

Miller, who was mission director in Mauritania during the 1985 drought, asserts that during the two major famines, millions of lives were saved along the wide belt area of the Sahel by the effective response of the international community, including the United States.

"In Mauritania, during the drought, about 90% of the food requirements were met by outside sources," he says. "The United States provided 25% of this assistance."

Comparing his experience in Mauritania with posts elsewhere in Africa, Miller says, "Mauritania was

a Moorish-Arab state and was a different experience for me.

"The major preoccupation in Mauritania was the water crisis and the need for food, both of which were exacerbated by the drought," he adds.

A largely desert country, there is clear and visible evidence of the encroachment of the desert on fertile lands. With that, there has been a change in the way of life of the traditional nomadic population, he explains.

"The people, who were culturally oriented to the desert, were living in an area that lacked the capacity to sustain them because of the declining water table and the ensuing drop in agricultural production," Miller says.

"Faced with the scarcity of water, the people migrated from those desert areas to the cities, areas to the south or across the border into Senegal."

Now stationed in Burundi, Miller administers a \$4 million AID program that concentrates on developing agricultural potential for food production.

"Conservation efforts are particularly significant," he says. "A mountainous country with heavy rainfall, Burundi also faces the threat of declining agricultural productivity and deteriorating soils."

In his experiences with AID, Miller has been impressed by the diverse and unspoiled cultures found in Africa.

"From a large country like Mauritania to the smallest, the Cape Verdes Islands, each country is fascinating and intriguing in its own way. Every post stands out in my mind as offering something different and commendable.

"As I look back on my 25 years in the Foreign Service," concludes Miller, "I wouldn't do anything differently."

Long is a writer-editor in the Office of Publications.

Reunions Planned for Retirees

FORMER CONTROLLERS

There is AID life after retirement for former controller employees. Retirees can keep in touch with colleagues through the AID Controller Alumni Organization, which has been in existence for over six years.

Members meet annually, alternating between the Washington area and other locations around the country. Reunions have been held in Colorado, Florida and, most recently, in Arizona. Invitations for the 1988 reunions have been extended by Texas and Hawaii.

If you are retired or plan to retire soon, you are invited to join the nearly 200 former controllers in 50 states who keep in touch through an annual newsletter, reunions and local luncheons.

Contact John Glakas of 10312 Bells Mill Terrace, Potomac, Md. 20854, 301-983-1466 or Marian Nelli of 8010 Park Overlook Dr., Bethesda, Md. 20817, 301-469-7327.

FORMER IIAA MEMBERS

The annual reunion of former employees of the Institute of Inter-American Affairs (IIAA), a predecessor of AID, is planned for May 10.

The reunion, to be held from 1-4 p.m. at the Glenmont-Connecticut Avenue Recreation Center, 3201 Randolph Rd., Wheaton, Md., also will mark the anniversary of IIAA, which was created in March 1943.

For additional information, contact Eugene Campbell, 4701 Willard Ave., Chevy Chase, Md. 20815, 301-656-2589.

OFDA Aids Victims of Cyclone Uma

The United States is providing over a half million dollars to assist victims of Cyclone Uma, which struck the South Pacific islands of Vanuatu on Feb. 7, killing 45 people.

The cyclone caused severe damage to the main island of Efate and devastated the capital city of Port-Vila. Estimated damage is placed at \$100 million. Crop damage is estimated at \$133 million.

"We immediately provided \$25,000 to our ambassador in Papua New Guinea to aid the victims," Administrator Peter McPherson said at a press conference at the State Department Feb. 13.

"We are now airlifting through the Department of Defense 500 tents and 360 rolls of plastic sheeting. We have sent one disaster expert from our mission in Fiji to evaluate the situation and coordinate ground logistics."

The Office of U.S. Foreign Disaster Assistance has financed the costs for supplies and transportation, estimated at over \$550,000.

Port-Vila, a city of over 16,000 people, was declared a disaster shortly after the cyclone passed through the islands with sustained winds of 75 knots and gusts of up to 100 knots. The hurricane damaged 95% of all buildings in Port-Vila and virtually wiped out the country's main cash crop, copra, worth \$20 million a year in exports. Five thousand people were left homeless in Port-Vila alone.

Preparations Starting for Bookfair 87

In preparation for Bookfair 87, the Association of American Foreign Service Women is seeking donations of books, art objects, foreign coins, stamps and first-day covers in good condition.

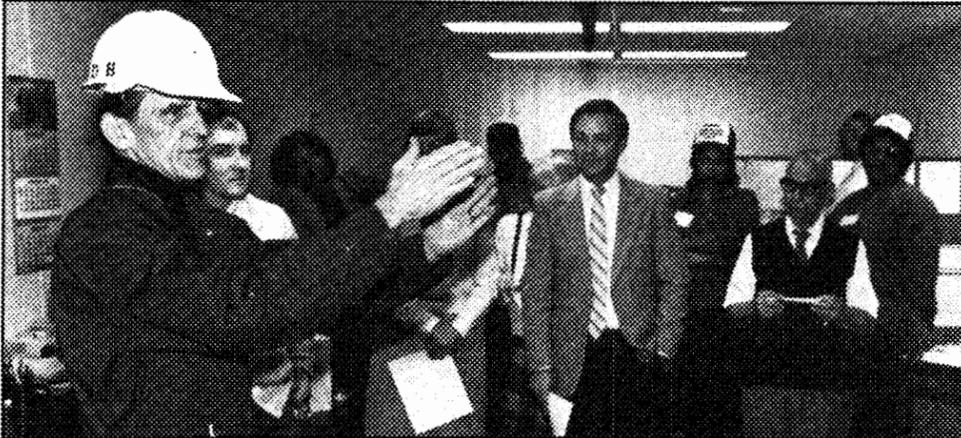
Hardcover and paperback fiction, non-fiction of every variety, cookbooks, children's material, reference manuals and books in any foreign language will be appreciated. Periodicals are no longer accepted.

Bookbins are located in Main State at the garage elevators in the basement and at the 21st and D street entrances. The bookbin at the Foreign Service Institute has been placed on level C near the garage entrance.

To arrange for home pick-up, contact Barbara Huso, bookroom manager, at 223-5796 daily (except Wednesday) between 9:30 a.m. - 3:30 p.m.

Bookfair 87 is scheduled to take place in October. Proceeds from the week-long sale benefit a scholarship fund for foreign service children and various community activities in the District of Columbia.

AID BRIEFS



Howard Cradick, chief of the Transportation Division in the Bureau for Management's Office of Procurement, gives an overview of the division's responsibilities at the "Transportation Fair" Feb. 12. Demonstrations and exhibits were used to familiarize bureau staff with the scope of the division's work.



Instructor Lawrence Heilman (left) discusses with International Development Interns (IDIs) (from left) Linda Whitlock, Peter Kresge and Patricia Jordan the evolution of various international development institutions. The interns were participants in a new entry training course for mid-level officers and IDIs.

IN MEMORIAM

EDWARD NADEAU

AID employee Edward J. Nadeau, 50, died of cancer Jan. 9. He was a supervisory program officer in the foreign service medical complement.

Nadeau joined AID in 1962 as a junior management intern. During his almost 25 years with the Agency he served as a program officer/multisector officer in Costa Rica, Dominican Republic, Nigeria, Vietnam and in AID/Washington's Latin America and the Caribbean Bureau.

Survivors include his wife Sheila, two sons and four daughters. Expressions of sympathy may be sent to Mrs. Nadeau at 4420 Riverside Loop, McMinnville, Ore. 97128.

WILLIAM KUTA

AID retiree William S. Kuta of Adelphi, Md., died at the Washington Adventist Hospital Dec. 31 as a result of a heart attack. He was 73.

Kuta joined AID's predecessor organization as a budget officer in 1961. He worked in that capacity in AID/Washington until his retirement in 1970.

Prior to joining the Agency, Kuta had worked for the old Civil Aeronautics Board and the Maritime Administration.

He is survived by his wife Florence, two sons and two daughters.

CARROLL HINMAN

AID retiree Carroll S. Hinman, 73, died recently of congestive heart failure at Mt. Vernon Hospital.

Hinman joined AID's predecessor organization in 1954. He was transferred to the Foreign Service in 1957 and served in the mission in Spain as a program officer. When he returned to AID/Washington in 1962, Hinman was assigned to the Africa Bureau.

In 1967 Hinman served as mission director in Kenya. Assigned to the Africa Bureau in AID/W as a special assistant in 1969, Hinman remained in that position until his retirement in 1970.

Survivors include his wife Jean, three sons and a daughter. Expressions of sympathy may be sent to Mrs. Hinman at 1405 Namassin Road, Alexandria, Va. 22308.

Sherper is New Director in Yemen

Kenneth Sherper, a native of Minneapolis, Minn., was sworn in as director of AID's program in the Yemen Arab Republic at a ceremony in the State Department Feb. 11.

A career foreign service officer with 23 years of experience in international economic development, Sherper will oversee a \$22 million program to improve agriculture, educational training, child survival and village water systems and a \$10 million Food for Peace Title I assistance program.

"I believe there is an excellent opportunity during the next few years for the United States to help the Yemeni strengthen their economy through assistance in modifying key economic policies and encouraging selected production activities to be shifted to the private sector," said Sherper.

Since 1982, Sherper has been director of the Office of Technical Resources in the Bureau for Asia and Near East.

He began his career with the Agency in 1965 as a rural development officer in Korea. Sherper served as AID's deputy director in Lesotho from 1979-1981 and chief of the Agriculture and Rural Development Office in Ethiopia from 1976-1979.

Sherper received a bachelor's degree in agricultural sciences and a master's degree in agricultural economics from the University of Minnesota. In addition, he has a master's in public administration and a doctorate in development economics from Syracuse University.

Conferences to Spotlight Opportunities

AID will make available \$110 million in federal contracts in fiscal 1988 to minorities and women who run their own businesses or private voluntary organizations and historically black universities.

The first of four AID-sponsored conferences on "Opportunities for International Business" was held in San Francisco on March 11 to explain how these contracts can be obtained.

"This is a wonderful opportunity for minorities and women who own their own business or head private voluntary organizations to learn what they can do—and how they can benefit—by helping the U.S. government provide assistance to more than 70 developing countries," said Bill Anthony, director of the Office of Media Relations.

Other conferences are scheduled in Atlanta, Chicago and Boston. For further information, contact Bree Fary at the Office of Small and Disadvantaged Business Utilization at 703-875-1551.

Panama Strives to Protect Environment

Institution building is central for sound natural resource management. To build a strong base for environmental awareness and action in the developing world, AID supports private organizations such as Fundacion PA.NA.M.A. Fundacion PA.NA.M.A. brings together a number of private environmental groups forming a consortium for conservation and a source of expertise not only for Panama but for the Central American region. The foundation's president, Felix Nunez, explains the organization's program.

by Felix Nunez

Panamanians like to say, "Panama is more than a canal." Best known for its interoceanic canal, it is a tropical country with rich and varied natural vegetation and a diverse fauna that includes species from South and North America. Bathed on both sides by oceans, its coasts are famous for their beauty and abundant marine life (the name Panama means "abundance of fishes").

But Panama, like other tropical countries, has not escaped the ravages of uncontrolled exploitation of natural resources and the environment. The accelerated degradation of forests (the rate of deforestation has been estimated at 2% annually) and increasing urbanization (almost one-half of Panama's population is concentrated in three cities: Panama, Colon and David) contribute strongly to the rapidly changing environmental scene.

Today, Panama's government is striving to protect natural resources and the environment. In recent years, the country has made substantial progress in the development of natural resource management programs. Budgetary and administrative deficiencies, however, have restricted these efforts. Problems are exacerbated by itinerant farmers who are

colonizing forest areas at a rate of about 70,000 hectares per year and thousands of frustrated *campesinos* who migrate every year to the main cities.

Recognizing the need for increased private sector involvement in the management and protection of natural resources and the environment, a number of Panamanian conservation groups formed the Foundation for National Parks and the Environment (Fundacion PA.NA.M.A.) in January 1983.

Their main objective was to build a strong organization through the private sector that could actively and effectively participate in the decision making, planning and management of Panama's natural resources and environment. Fundacion PA.NA.M.A. became the private sector's legal entity to coordinate and consolidate conservation efforts.

In June 1984, the group received a \$1 million operational grant from AID, channeled through the World Wildlife Fund-US, to strengthen its administrative and management capacity.

During the first two years of AID funding, Fundacion PA.NA.M.A. initiated a series of seminars and workshops on subjects such as administrative procedures, accounting, fund raising, environmental education, implementation and



Fundacion PA.NA.M.A. is working to conserve rapidly disappearing renewable resources.

management of environmental programs and public relations.

National and international instructors conducted these training sessions, which were attended by participants from private groups and government agencies such as Panama's National Renewable Natural Resources Institute (INRENARE), the Ministry of Education and the University of Panama. A mobile seminar on management and administration of Costa Rica's national parks and a managerial seminar are scheduled for this spring.

In addition to training efforts, the foundation focuses on resource management education and research. More than 40 field projects are conducted by member groups throughout the country. The majority are in support of Panama's National Park and Protected Areas System program (park interpretation, environmental education, infrastructure development, public awareness and tourist promotion). More specialized projects are oriented to research fauna, flora, agroforestry and mariculture.

One of the more ambitious programs is the protection of marine turtles. Thousands of turtles arrive every year to lay their eggs on both coasts. For example, on the small island of Canas off the Pacific coast, turtles made an estimated 30,000 nests in one year. However, humans and animals seriously threaten their existence on the island. The foundation has been working with local groups to find a rational solution to the problem.

The first technical meeting on the management of marine turtles in Panama was sponsored by the foundation. It was attended by represen-

tatives from the community, municipal authorities, officials from INRENARE, the Institute of Hydro-Electric Resources (IRHE), the Department of Marine Resources, biologists and geographers from the University of Panama and local conservation groups.

A cooperative project for the conservation and management of marine turtles of Panama resulted. Its aim is to develop a sound plan for the management of marine turtles to ensure a balance between rational use of turtles and long-term protection of the species. The project includes biological and ecological studies, socio-economic evaluations, the development of a management plan and the establishment of a "turtle nursery." Environmental education regarding turtles and the need for conservation of the species is a high priority.

The foundation also is involved in a wide range of other activities. It is supporting the First International Workshop on the Management of the Green Iguana, hosting a meeting of the Joint U.S.-Panama Commission on the Environment—created under the canal treaty—and collaborating on the publication of a Panama Canal watershed report.

The foundation also provides consultation services on Panamanian and regional environmental problems to such diverse groups as the U.S.-based National Wildlife Federation, U.S. universities and Latin American environmental organizations.

Recently, Fundacion PA.NA.M.A. was invited to participate in INRENARE's National Plan for the Protection of Wildland and Natural Renewable Resources, an extensive effort to curb the rate of degradation of forested areas and the uncontrolled exploitation of wildlife.

The foundation is part of a growing environmental network. The U.S. National Parks and Conservation Association and the foundation will recommend creating a Continental National Parks Network that will include Canada and Latin America. The proposal will be made during the Fourth World Wilderness Congress to be held in Colorado in September.

The group cooperates with LIDEMA, the newly-formed Bolivian Environmental League, a private voluntary organization similar to Fundacion PA.NA.M.A. In addition, the foundation shares its ideas on private conservation group development with CONAF-Department of Wildlife in Chile.

Fundacion PA.NA.M.A.'s record is one of strong enthusiasm, dedication and great concern for the future of Panama's natural resources. Like all organizations, the foundation has experienced growing pains. But in its evolution as one of the first private environmental federations in Latin America, the foundation serves as a model for similar initiatives and proves that a united effort by public and private conservation organizations can contribute to the conservation of rapidly disappearing renewable resources.



The foundation, one of the first private sector environmental federations in Latin America, has mounted an extensive effort to curb the rate of degradation of forested areas and the uncontrolled exploitation of wildlife.

by Raisa Scriabine

The camu-camu fruit from the jungles of Peru has 10 times the vitamin C of an orange. The common periwinkle plant—discovered in the Caribbean—is the basis for treating Hodgkin's disease and lymphocytic leukemia. Drugs for malaria and glaucoma originated in the tropical forests of the Amazon.

In 1929 the ivory nut palm produced "vegetable ivory" used to make buttons and added about \$1.2 million to the economy of Ecuador. Then the plastics industry boomed and the palm was forgotten. Today, U.S. chemical companies have rediscovered the ivory nut and are looking at it to produce D-Mannos, a rare sugar used in the biochemical and pharmaceutical industries.

Plants provide clothes, shelter and food as well as save lives. The tropical forests—where almost half of the world's plant and animal species are found—are gold mines for modern medicine and industry. Germplasm from wild species can enhance the productivity of existing agricultural food crops. Yet, it has been estimated that less than 1% of existing tropical plants have been studied for their potentially useful properties.

Many will never be studied. According to the U.N. Food and Agriculture Organization, at the current rate of destruction, 11 million hectares of tropical forests are lost annually—cleared for farming, ranching, fuelwood, lumber production and other activities as population pressures grow and the need for fuel, wood parts and agricultural land increases. As many as two million species may become extinct within the next 50 years.

The loss of tropical forests has other effects. Loss of forest cover can increase soil erosion and degradation of fragile lands. Some scientists believe that loss of tropical forests may increase atmospheric carbon dioxide causing a "greenhouse effect" or a warming of the atmosphere. A few degrees increase in the world climate could melt the polar ice caps, causing rising sea levels and massive coastal flooding, changing the nature of agriculture around the world.

"The environment is a vital part of the development process," says Administrator Peter McPherson. "The wise and sustainable use of natural resources is fundamental to human survival. AID is proud of its achievement in integrating environmental concerns into development. Our past efforts are only the beginning of a long-term commitment in this area."

"AID has long been aware that the loss of biological diversity affects economic growth and development," says Nyle Brady, senior assistant administrator of the Bureau for Science and Technology. "Programs aimed at sustainable natural resource management and species conservation have been a concern of the Agency for a number of years. For example, AID, along with other federal agencies, sponsored a U.S. Strategy Conference on Biological Diversity in November 1981 to promote public awareness of biological diversity and to develop recommendations for U.S. and international action."

The Agency has taken steps to integrate sound natural resource management practices into economic development programs. Today, AID is the only donor to have a core of professionals in the field to screen and coordinate environmental activities. Environmental advisors, foresters and other natural resource management specialists help the Agency to extend its environmental dialogue to the governments of developing nations and to build a constituency for conservation where it is needed most.

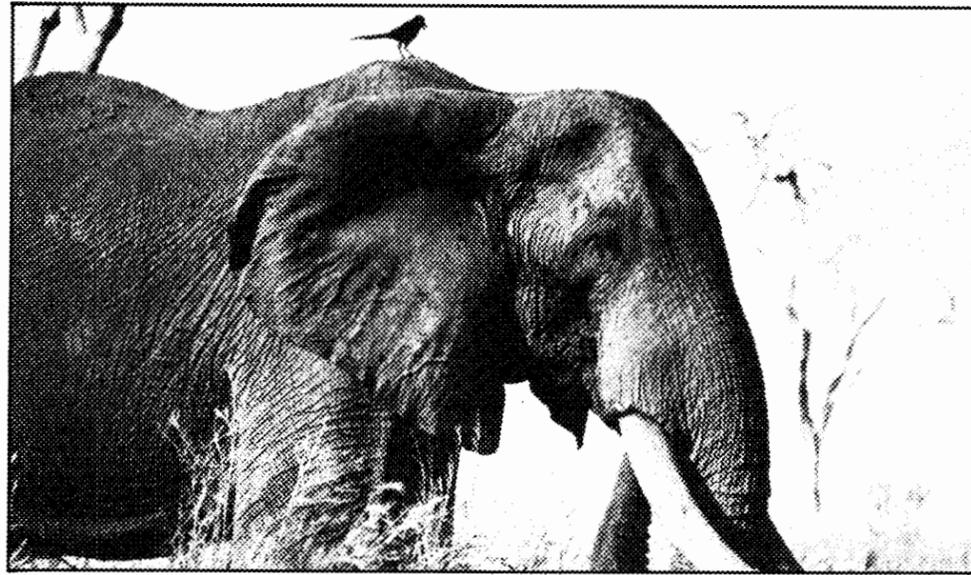
AID is also the only international development assistance agency legally bound to ensure the environmental integrity of its programs. Environmental examination is a requirement for the Agency's development projects, and the process has become a model for other donors.

Recently, new steps were taken to strengthen and reinforce that commitment. In 1983, Congress amended the Foreign Assistance Act of 1961 by adding Section 119 on Endangered Species. AID was directed to assist developing countries to protect and maintain wildlife habitat and to develop better wildlife management and plant conservation programs. The Agency also was directed to take the lead in preparing a U.S. government-wide strategy to conserve biological diversity in developing countries. In 1984, AID set up an Inter-agency Task Force on Biological Diversity, chaired by Brady, and submitted its

At the current rate of destruction, 11 million hectares of tropical forests are lost annually.



Efforts Help Preserv



Programs aimed at sustainable natural resource management and species conservation have been a concern of the Agency for a number of years.

strategy to Congress in 1985.

In 1986, Congress strengthened Section 119 and earmarked funds for specific biological diversity programs. A new Section 118 was added to the Foreign Assistance Act instructing AID to help conserve tropical forests in developing nations.

"A comprehensive natural resources management plan for sub-Saharan Africa was designed to better define the Agency's approach to environmental and natural resource issues for that region," Brady points out. "A major emphasis of the plan will be linking conservation of natural resources and the preservation of biological diversity, particularly in wildlands areas with rural development activities. It will focus on specific agro-ecological zones and identify target countries for program emphasis."

The Asia and Near East Bureau, in cooperation with the Department of the Interior's Fish and Wildlife Service, has taken steps for conserving biological diversity in the Near East and arid South Asia. Results are already evident. An interagency agreement between the bureau and the U.S. Fish and Wildlife Service provides grants to develop and manage conservation projects in the Asia and Near East region.

These grants have enabled a number of activities to take place, including:

- The government of Oman updated its sea turtle management plan;
- The College of Environmental Science and Forestry of the State University of New York, working with Indian organizations, produced educational programs for use in classrooms and for television in India; and,
- The Royal Society for the Conservation of Nature in Jordan constructed a Visitor Information Center at the Shaumari Reserve, a Ramsar treaty-designated wetland, to inform the general public and visiting school groups about the unique flora and fauna of the area.

Efforts also are under way to develop a national system of nature conservation clubs in Pakistan and support the Wildlife Institute of India.

"A biological diversity working group was established at AID to coordinate and develop a set of activities under congressionally allocated funds earmarked for biological diversity for fiscal 1987," says Jack Vanderryn, chairman of the group.

"We will identify priority areas where AID resources can be used in the most effective way possible and will leverage additional funding from other sources," he adds. "A number of programs are already under way."

For example, "Madagascar is among the highest conservation priorities in the world," says Ed Toth, natural resources advisor in the Africa Bureau. The island nation off the coast of Mozambique not only has a high level of species diversity, but a large number of these species are found nowhere else. Much of the flora and fauna is endangered.

"AID will support the World Wildlife Fund-US to carry out an inventory of the flora and fauna of southern Madagascar and assist rural development projects to relieve pressures on protected areas," Toth notes. "The effort will take place in and adjacent to the Beza Mahafaly Reserve, which contains many rare and unique xerophytic plants and four species of lemurs. A training program in natural resource management will be expanded."

Working with the African Wildlife Foundation, AID will establish a conservation education and extension program as part of the curriculum at Mweka College of African Wildlife Management, an internationally known regional institution in Tanzania. A number of Mweka's graduates have gone on to hold senior natural resource management positions in their respective governments. The directors of wildlife conservation programs in Kenya, Zambia, Malawi and Tanzania, for example, are Mweka graduates.

"AID helped fund Mweka when it was established in 1963 and again in the late 70s," Toth says. "It is a logical move for us to upgrade and expand the conservation program there now."

"AID will assist the Smithsonian Institution's collaborative effort to protect two endangered species in Nepal—the one-horned rhino in the Chitwan National Park and the wild Asiatic buffalo in the Kosi Tappu Wildlife Reserve," says Stephen Lintner, environmental coordinator in the Asia and Near East Bureau. "We will be putting together the information necessary to begin to better manage their habitat."

Biological Diversity

"The Agency will help with rhino population research and monitoring. We will also promote alternative fuels and fuelwood plantings among local villagers to decrease the need for using park resources as the primary source of fuel. The reforestation effort will relieve pressure on the natural forest, and the project will also have an impact on the sustained long-term management of the park grasslands.

"AID also will support an effort by the Smithsonian to conduct research that will help understand the habits and population dynamics of this endangered wild Asiatic water buffalo that will lead to better management," he continues.

The Caribbean also is an area that can benefit from better management of its natural resources. "We are implementing a management plan for a marine park in Belize," says James Hester, chief environmental officer in the Bureau for Latin America and the Caribbean. The park on the barrier reef—the second largest in the world—is the first marine park in Belize. The management plan will help protect the most complex coral reef system in the Atlantic while allowing low impact tourism and fishing in the buffer zones. "The plan will extend protection to mangroves, sea grass beds and coral reef habitat," Hester stresses.

AID took an innovative step in the mid-70s to assure that environmental considerations are a part of the Agency's development planning process by requiring environmental examinations to be conducted of all proposed development projects. "This can help to build conservation components into development projects right at the start," says Norman Cohen, the Agency's environmental coordinator.

The reviews stimulate a dialogue with decision makers in developing countries and often lead to policy changes. As a result, a number of measures have been taken to help preserve biological diversity and even to avert some potential ecological problems.

In Peru, for example, the Central Selva Resource Management project began in 1982 in the jungle of the Palcazu Valley, on the western edge of the Amazon basin.

"The government of Peru in its initial plans for the valley projected large-scale agro-industrial development including increased colonization of an area that contained large tracts of primary tropical rain forest," says Hester. "The AID environmental assessment re-oriented the project in favor of very limited small-scale agriculture and natural forest management as the principal activities in the area by the region's existing inhabitants, including the Amuesha Indians. No new colonists came to the valley. The Indians received title to the land and were legally recognized by Peruvian authorities."

Through a subsequent loan agreement with AID, the government of Peru designated a national park and a protected forest in the Palcazu watershed. AID is now assisting with the consolidation of the 1,330 square kilometer Yanachaga-Chemillen National Park and the 33 square kilometer San Matias Protection Zone.

The Central American Bank for Economic Integration (CABEI) now has the ability to conduct environmental assessments of all its development projects as a result of an AID environmental review of the bank's programs. "As a condition for a loan to revitalize CABEI activities, AID suggested the adoption of environmental assessment procedures by the bank and the addition of an environmental professional to the staff to monitor the environmental soundness of the bank's projects," Hester says.

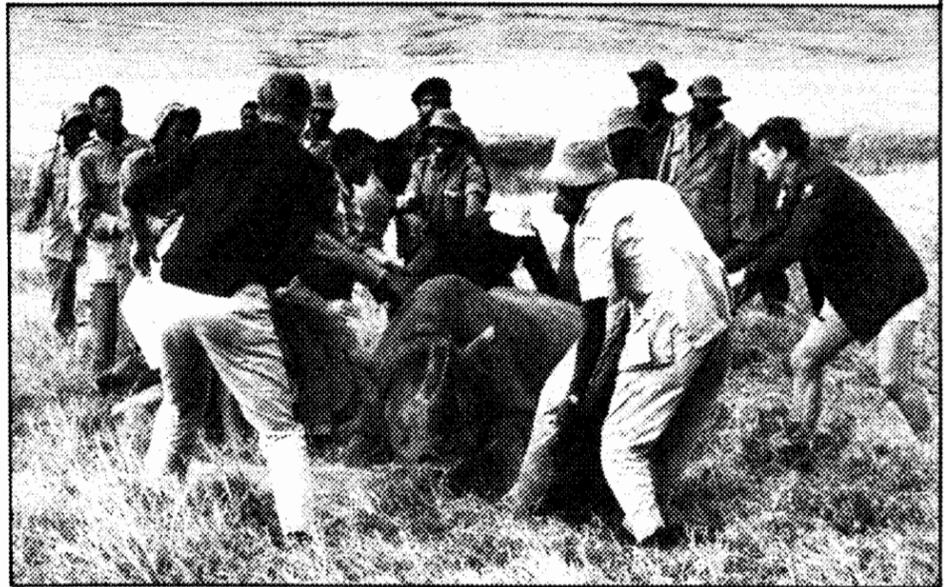
"AID also is cooperating with the World Bank and the Asian Development Bank in conducting environmental assessments of two major thermal power plants in the Sind Province of Pakistan and will provide an advisor to the Ministry of Agriculture in Indonesia to help design an environmental assessment process for the ministry to comply with Indonesia's new environmental assessment law," adds Lintner.

To be effective, conservation of biological diversity requires sound planning and management as well as strong public support and participation.

Comprehensive and accurate natural resource information is basic to this process. Yet, in many developing nations, gaps often exist in available natural resource information. AID helps fill this gap in a number of ways.

On a local level in Africa, for example, AID set up a data gathering and analysis model through its Ruhengeri resource analysis and management project in Rwanda. The heavily populated Ruhengeri prefecture, or district, contains some of the most productive agricultural regions in the small central African nation. The Ruhengeri also holds major high altitude wetlands that control water flow into Rwanda's two

Loss of tropical forest cover can increase soil erosion and degradation of fragile lands and may cause a dangerous "greenhouse effect."



AID is establishing a conservation education and extension program as part of the Mweka College of African Wildlife Management.

largest interior lakes as well as into the Mukungwa watershed. The watershed links with the Parc National des Volcanes, which is home for the endangered mountain gorilla, a vanishing species that has attracted international attention and concern.

More than half of the forested area within the boundary of the national park has disappeared in the last 25 years, according to Bessie Boyd, environmental officer in the Africa Bureau. Demand for firewood and bamboo poles continues to chip away at the fragile forest. The wetlands have been exploited, resulting in a decline in the quantity and quality of water resources.

AID, working with the South-East Consortium for International Development, conducted the first systematic effort to compile an environmental data base and assessment of environmental trends in the Ruhengeri. It now serves as a model for other districts in Rwanda.

To assist nations in establishing a natural resource information base, AID pioneered the environmental profile, which analyzes a nation's resources, provides an analysis of its environmental laws and institutions and recommends environmental action. Some 23 have been completed since 1979.

The profiles have influenced the design and funding of development programs and strengthened local institutions by improving their capacity to incorporate environmental information into development planning and education programs.

In Costa Rica, for example, the profile was used to develop environmental education materials including texts for primary and secondary schools as well as universities.

The Honduras profile was the impetus for an extensive natural resource management project instrumental in halting soil erosion in the Choluteca watershed area. It also was used as the basis for the environmental education programs of the Honduran Ecological Association (AHE), the largest private conservation organization in the country. The AID-supported association has developed environmentally-related short courses, seminars, posters and television programs. The organization's membership expanded, and a regional office was opened.

To supplement the information contained in country-specific profiles, the Agency has provided support to the International Institute for Environment and Development to compile a regional profile for Central America. "This marks the first effort to integrate individual profile data into a regional analysis," says Hester. The effort will identify the environmental issues shared by Central American nations and will open up avenues for joint activities.

"AID makes every effort to involve experts of a particular country in the process," noted Molly Kux, environmental coordinator in the Bureau for Science and Technology. "In Thailand, the Thai Development Research Institute took the leading role in analyzing the nation's environmental situation. The resulting profile was recently used in the five-year development plan—the first time this type of information has been used in national planning."

"To follow up on the environmental profile, AID is beginning an environment and natural resources planning and management project in Thailand," adds Lintner. "This project will further examine the broad range of environmental issues and institutions in the country at all levels. These will include industrial pollution, solid waste management, forestry, coastal zone management, biological diversity, environmental assessment, training and the development of private voluntary organizations."

In Ecuador, a two-volume, 1,200-page country profile was prepared by the local private conservation group, the Ecuadoran Foundation for the Conservation of Nature (Fundacion Natura). A hardcover, full-color summary of the report was published as a popular book.

Closely related to the profiling effort is the development of national conservation strategies. Working closely with organizations such as the International Institute for Environment and Development and the Canadian International Development Agency, AID supported the development of national strategies for Sri Lanka and Nepal. "These conceptually follow the World Conservation

(continued on page 13)

Research Aimed at Saving Baby Alpacas



Distinctive, fluffy animals, the alpaca roam the Andean highlands of Peru and provide the people of the region with food, fiber and a source of income.

Each year, however, many young alpacas fall victim to disease. Their most common ailment is neonatal enteritis (diarrhea), which may kill up to one-half of the baby alpacas in a herd. And, the impact on Peru and other South American countries that rely on the animal is devastating.

Peru, Bolivia, Ecuador, Chile and Argentina contain the major population of South American llama and alpaca (camelids) in the world. The

“Not only do herdsman suffer direct economic losses when their animals die, the overall Peruvian national budget suffers.”

estimated world population of alpaca is 3.5 million, 86% of which are found in Peru. Of the world's 3.1 million llamas, 29% are also in Peru.

Alpaca and sheep wool are Peru's primary livestock export products. The alpaca fiber possesses high textile value and sells at a price four times that of sheep wool.

Not only do herdsman suffer direct economic losses when their animals die, the overall Peruvian national budget suffers indirectly from lost taxes and export income.

If more were known about the causes of neonatal enteritis, specific diagnostic tests and protective vaccines could be developed to control the disease.

The clinical signs and gross patho-

logical changes that occur in alpaca with the disease are recognized. However, the production or development of the disease organism has not been defined clearly. Consequently, control efforts during the past 30 years have failed.

In 1981, a cooperative study of neonatal enteritis in alpacas was initiated in Peru and the United States as part of an animal health research project within AID's Small Ruminant Collaborative Research Support Program (CRSP).

AID research has focused on finding the cause of the disease and on developing accurate diagnostic methods and control measures. The researchers intend to identify and develop medical technologies that will prevent the damaging impact of this infectious disease, particularly in Peru.

To date, investigators have isolated the toxin proteins that share biochemical and immunological characteristics with the enterotoxin that causes human food poisoning.

Although no conclusive evidence was obtained in a preliminary experimental infection, researchers have identified a specific type of the disease from which an effective vaccine may be developed. The research results have practical applications for developing vaccination programs in alpacas and other species of camelids.

Related research on the importance of *E. coli* in alpacas also has been rewarding. Rafael Nieves, a graduate student at Colorado State, has discovered evidence of the active role of certain *E. coli* in the development of neonatal enteritis in alpacas.

The research suggests that newborn alpaca could derive protection through milk from their mothers who have been vaccinated for *E. coli*. As is known from other domestic species, such “passive” antibody transfer from the maternal colostrum to the neonate plays an important protective role during the first days of life.



A baby alpaca nurses from its mother. Colostrum (early milk) provides antibodies to the baby that protect it against infectious diseases that it may encounter early in life.

However, if passive transfer fails, either as a result of poor maternal antibody provision or because the young alpaca does not absorb the antibodies, the baby will not be protected.

A significant contribution regarding this passive antibody transfer in alpacas has been made by Antonio Garmendia, a Peruvian veterinarian who recently received his Ph.D. degree from Washington State University. His research, partially funded by the Small Ruminant CRSP, confirmed the colostrum antibody transfer in normal alpacas, but also found a failure of antibody transfer in 9% of the neonates. These results may play a part in designing new alpaca vaccination programs.

Researchers are confident that they have at hand the basic tools for controlling neonatal enteritis and for measuring the failure rate of antibody transfer from mother to baby alpacas. They also have a beginning understanding of how *E. coli* causes disease in alpacas. Efforts now focus on inducing high anti-neonatal enteritis antibody levels in vaccinated dams and in transferring this protection to their neonates.

This is only the beginning of success in controlling neonatal enteritis. Further research will help Peru and its neighbors to reap greater economical benefits from healthier herds of alpaca and other camelids.

food industry, recently held its semi-annual steering group meeting at the Jamaican Embassy in Washington, D.C.

The meeting brought together senior technical officials of eight major U.S. food companies to review achievements for the past year and to report on new developments.

In his remarks, Nyle Brady, senior assistant administrator for the Bureau for Science and Technology, cited the project as an excellent example of technology transfer through the private sector. He pointed out that the participating American companies provide information, training and assistance on a voluntary basis as a contribution to development.

Martin Forman, director of the Office of Nutrition and chairman of the meeting, noted that in 1986, 40 U.S. companies responded through Project SUSTAIN to 55 technical assistance requests to improve food processing in 17 developing countries.

This year, Project SUSTAIN plans to issue a newsletter to disseminate technical information to developing country food processors. It also is expected that about 20 food processors from developing nations will attend a 2½-week training course in food quality assurance at the University of Maryland. The course will be followed by hands-on experience at seven U.S. food companies.

Companies represented at the meeting included Campbell Soup, General Foods, General Mills, Gerber Products, Hershey Foods, Kraft, McCormick and Company and the Pillsbury Company.

Nominations Announced

Fifty officers have been nominated for promotion within and into AID's Senior Foreign Service (SFS) as a result of recommendations by the 1986 Senior Foreign Service Consolidated Selection Board.

Because career members of the SFS are commissioned as Consular Officers and Secretaries in the Diplomatic Service of the United States, officers must be nominated by the President and confirmed by the Senate.

The nominations are as follows:

TO COUNSELOR

Gary Bisson	Robert Coulter
Bruce Blackman	Peter Davis
Mervin Boyer, Jr.	Leslie Dean
C. Stuart Callison	Charles DeBose
Francis Conway	Jeffrey Evans

John Foti	Steven Mintz
Coinage	M. Charles
Gothard, Jr.	Moseley
John Greenough	Gary Nelson
Joe Hill, Jr.	Bruce John Odell
Mary Huntington	Hans Peterson
Kevin Kelly	Dale Pfeiffer
Denton Larson	William Rhodes
Ken Lyvers	Richard Seifman
Frederick	Jonathan Sperling
Machmer, Jr.	Joseph Stepanek
Gary Mansavage	Robert Thurston
David Mein	Sean Walsh

TO MINISTER-COUNSELOR

Janet Ballantyne	Albert Hულიang
John Blackton	Elizabeth
Timothy Bork	MacManus
Neboysha Brashich	David Merrill
Eugene Chiavaroli	Lewis Reade
John Eckman	Thomas Reese, III
Arthur Fell	Lawrence Saters

TO CAREER MINISTER

Martin Dagata	Allison Herrick
Robert Halligan	Lois Richards

PROJECT SUSTAIN HOLDS MEETING

Project SUSTAIN, a cooperative program between AID and the U.S.

Equality Struggles Related



"The Afro-American and the U.S. Constitution" was the theme of the AID-Department of State Black History Month program in February. Throughout the month speakers focused on the impact of the Constitution on the struggles for equal rights and equal protection of black Americans.

Mike Espy, the first black U.S. congressman elected from the State of Mississippi since Reconstruction, was the featured speaker at the opening ceremony of the Black History Month program. Espy, the youngest Democrat in the House of Representatives, was invited because of the relevance of his election to the role that the Constitution has played in guaranteeing blacks the right to vote in the United States.

Attributing his victory to the efforts and inroads made by black American civil rights pioneers such as Fannie Lou Hamer and Medgar Evers, who fought for the right to vote in

Mississippi, Espy said, "The election of a black man to the U.S. Congress from the State of Mississippi represents an idea whose time has come. Since November, it seems to me that I have seen the effect on the children. They seem to be learning faster and have more pride over the achievement in November and the marvelous opportunities which lie ahead for them."

Noting the gains blacks have made in access to public accommodations as a result of the Constitution and the Civil Rights Act of 1964, Espy said that black Americans cannot fully enjoy these rights and privileges because of the lack of economic resources and opportunities.

Espy challenged blacks to strive for excellence and make a difference in their communities.

In response to a question from the audience about what black employees in foreign affairs can do to help others to achieve excellence and make a difference, Espy announced that in April he plans to establish the Fannie Lou Hamer Leadership and Training Foundation to address problems related to education of children in the public schools in his district.

High school graduates have difficulty finding jobs, and exposure to the world outside their community is limited. The foundation would provide opportunities for them to

supplement their education by traveling each year to a different country.

He invited foreign service officers to visit Mississippi to give seminars or lectures to the children and to escort them on travels to foreign countries.

Other programs during the month included the Foreign Affairs Recreation Association's Musicians Workshop, a lecture by Samuel Proctor, an author and historian, and a program by Audrey Chapman, an author, educator and family therapist.

TENURE RATES FOR MINORITIES IMPROVE

A recent review by the Office of Equal Opportunity Programs of the Foreign Service Tenure Board Reports for July 1985 through January 1987 show a dramatic improvement in the tenure rate of minorities.

The table below shows percentages based on actual availability or numbers of candidates reviewed by each race and sex grouping.

FOREIGN SERVICE TENURE BOARD REPORT
July 1985 - January 1987

	Total Employees Reviewed		Employees Tenured		Employees Deferred		Employees Not Recommended for Tenure	
	Men	Women	Men	Women	Men	Women	Men	Women
Non-Minorities	103	30	98	28	4	—	1	2
%	100.0	100.0	95.1	93.3	3.9	—	1.0	6.7
Minorities	13	9	13	9	—	—	—	—
%	100.0	100.0	100.0	100.0	—	—	—	—
Black	5	7	5	7	—	—	—	—
%	100.0	100.0	100.0	100.0	—	—	—	—
Asian	6	—	6	—	—	—	—	—
%	100.0	—	100.0	—	—	—	—	—
Hispanic	2	2	2	2	—	—	—	—
%	100.0	100.0	100.0	100.0	—	—	—	—

Bangladesh

From page 3, column 4

Although the initial drive signed up only about 350 members—all domestic users—within six months following electrification of the PBS, 3,000 consumers had joined. The rapid growth of the Dhaka cooperative is typical of other rural co-ops. The cooperative currently serves 18,000 consumers.

"We exceeded the target due to an influx of industry to an extent not foreseen in the original feasibility study," says Syed Nur-Ul Islam, Dhaka PBS general manager. "We have 564 industries connected now, and 700 are awaiting service."

All along the Dhaka-Aricha Highway, the main thoroughfare from the capital to the outlying villages, new industries are springing up where once only rice paddies existed. Textile mills, pharmaceutical laboratories and printing plants are only a few of the varied industries that dot the road at every turn.

Monno Ceramics Industries, Ltd., which did not break ground until 1983 when electricity arrived, now employs 500. And, two years ago, the site of a PVC plastic pipe company, which produces pipe used for irrigation and for deep-well pumps for drinking water, was a rice paddy. Opened last fall, the company now employs 30 and expects to expand to 60 employees when operating at full capacity.

"In 1980, employment opportunity was nil," says General Manager Islam. "By 1983 electricity had created employment for about 2,000; in 1984 we added 3,000 more to the labor force; and

now industry probably employs 9-10,000 people."

Women in particular have benefited from the growth of rural employment opportunities. Pearl Garments, for example, has more than 200 employees, 80% of whom are women who had never worked before. Says the company's managing director, "Before electricity, women in the village had no opportunities. Now they can look after themselves."

The surge in female employment is reflected in the Agency's policy that each cooperative board appoint two women as advisors, if none are elected to the board, to represent women's concerns.

"REB and the PBSs have a mandate to serve the poor—households and farmers—and yet, at the same time, a co-op is supposed to be self-supporting," says Biggers. "The co-op has a chalk line to walk to try to survive and also serve a social purpose."

"The PBSs could not exist without industry. Domestic users simply could not support the cost. The first goal of each co-op is to offset domestic use with productive use by industry."

At the Dhaka cooperative, consumption of kilowatt hours by category of use from 1981 to 1985 shows the positive trend evident at all 17 AID-funded co-ops. While domestic power consumption remained stable at 22%, industry's portion rose from 44% to 59%.

Another indication of the success of the rural electrification program is that collections are keeping pace with billings. "At the Dhaka PBS, we have almost a 100% collection rate," Islam points out.

"This rate of collection is common

in all 17 AID-funded PBSs," says Biggers, who notes that the collection rate is only about 30% in urban areas.

Community participation through the cooperative process is an important part of the institution-building aspect of the program. In addition to the member-elected board, in each cooperative area, villagers serve as volunteers to explain the electrification program to their neighbors and assist with any problems consumers may have.

"The value of this system was shown during the loadshedding crisis that occurred last spring," says Khan, "when power was lost. Whereas urban consumers ransacked PDB offices, the co-ops weathered the crisis very well as a result of volunteers going door to door to explain the problem and reassure consumers that electricity would soon be restored."

As part of the program, AID has involved the private sector in Bangladesh from the outset. "The REB puts out contracts for bid to the private sector," says Biggers. "Local consultants and private companies have been trained in designing and building lines."

A major network of supporting industry also has developed as a result of the program. Although most of the necessary equipment was imported in the program's early stages, one goal was to encourage the local production of basic materials.

"AID essentially developed the pole industry in Bangladesh," says Biggers. Now Bangladesh produces not only poles, but transformers, insulators, irrigation pipe and the small electric motors that drive the

irrigation pumps as well.

Despite these gains, Khan points out that electricity has reached only 5% of Bangladesh's rural areas. "We've hardly begun," he says. "Villages without electricity have seen what it does and clamor for installation. Now villagers complain when there is loadshedding and they can't work as much as they want."

AID recently signed a \$60 million grant for RE III (1987-91) to finance intensification of the system in the 17 cooperatives built under RE I and II and to fund technical assistance and U.S. training for REB and cooperative staff for the overall program.

"We are also working with other donors to rationalize the pricing policies of the government," Warner adds. "The government is now subsidizing some rates. Through our policy dialogue, we are encouraging them to move to a price that covers the cost of supply."

The government's commitment to the program is demonstrated by its contribution of \$61.2 million to AID's \$179.3 million for RE I, II and III, says Mission Director Westley.

"Yet, the success of the rural electrification program does not depend merely on building the required infrastructure," he says. "Sustained generation of energy to rural areas depends ultimately on the ability of cooperatives to become financially viable by rationalizing the electric rate structure, intensifying the density of service and improving PBS management capability. This will be the focus of our continued efforts in rural electrification."

Chase is assistant editor of Front Lines.

Seminars Focus on AID-Farmer Relations

BIFAD Establishing a better understanding about the relationship between U.S. agriculture and assistance to developing countries was the purpose of a recent series of seminars sponsored by the Board for International Food and Agricultural Development (BIFAD).

"I believe the seminars went a long way toward defusing the criticism from U.S. farm organizations that AID programs are hurting U.S. agricultural exports," said Bob Kleis, BIFAD executive director. "I am also sure that AID staff became more aware of the difficult economic crisis faced by American farmers and the significance of this issue."

The five seminars brought together representatives of AID staff, farm organizations, the U.S. Agriculture Department and Congress to discuss various aspects of the U.S. farm and export situation and the importance of the developing world to U.S. agriculture. Leading scholars and practitioners in agriculture and international development were featured speakers at each seminar.

In his keynote address, G. Edward Schuh of the World Bank said U.S. government programs must share the blame for the economic plight of farmers. He also stressed the importance of international capital markets, exchange rates and international trade to the future.

But, Kenneth Bader of the

American Soybean Association said farmers had heard of too many instances of AID projects helping foreign competitors. He called for closer dialogue between AID and commodity groups to avoid conflicts in the future.

Iowa State University economists Stan John and W.H. Meyers explained the intricacies of international trade and forecast a "bottoming out" of farm prices and slow growth in export demand.

Although it is clear that AID's agricultural programs are beneficial to U.S. commodity trade in the long run, it is understandable why U.S. farmers with a short-run view oppose them, political scientist Robert Paarlberg argued. He explained that bad policies, in either the developing countries or the United States, could wipe out any potential trade.

The final speaker, Assistant Secretary of Agriculture Robert Thompson, reviewed changes that must be made in farm programs in order to restore the economic viability of the U.S. farm sector. He noted that the best prospect for expanding U.S. exports is in developing countries, once their incomes have improved.

About 50-75 participants attended the meetings, which were held in Washington, D.C., over a two-month period.

—John Stovall

REGIONAL SEMINARS HELD

The eighth annual Title XII Regional Seminars were held at Texas Technical University Jan. 22-23 and at Michigan State University Jan. 29-30. Organized by Jiryis Oweis, chief of BIFAD's country programs division, the meetings brought together AID representatives and nearly 150 participants from 65 universities.

Following the opening state-of-Title XII reports from BIFAD Executive Director Bob Kleis, AID Counselor Marshall Brown discussed the Agency's budget and Administrator McPherson's recent survey of Title XII activities.

Among the many presentations, Edward Hogan, an AID consultant, reported on a recently completed review of the Collaborative Research Support Program (CRSP) that examined the program and management aspects of CRSPs. In-depth studies of four CRSPs were conducted, including topsoils, sorghum/millet, beans/cowpeas and small ruminants. While citing several areas needing additional attention, Hogan said the team concluded that CRSPs were

doing a good job and deserved continuing support.

Handy Williamson, deputy director of AID's Office of Research and University Relations, noted that 12 Joint Memoranda of Understanding (JMOUs) involving 25 institutions were signed, matching support grant contracts were being negotiated with six schools that had been successful in the competition for fiscal 1987, and a total of 51 small research grants, amounting to more than \$3 million, had been made to the Historically Black Colleges and Universities (HBCU) research programs.

On the subject of development education, Gerald Thomas, president emeritus of New Mexico State University and a charter BIFAD member, stressed the importance of helping Congress and the general public understand the continuing need for international development assistance.

William Farnsworth, professor of extension administration at Utah State University, noted that the American public needs to know more about who really benefits from U.S. foreign aid.

Walsh Sworn In to BIFAD

Leo Walsh, dean and director of the College of Agricultural and Life Sciences, University of Wisconsin, was sworn in as a member of the Board for International Food and Agricultural Development in Washington, D.C., Feb. 13.

A native of Iowa, Walsh was appointed by President Reagan to serve on the board until July 1988.

He has been with the University of Wisconsin since 1959, serving in

various capacities including professor and chairman of the Department of Soil Science. Walsh also has been a consultant for AID and the Rockefeller Foundation for projects in Egypt, Brazil and Indonesia.

Walsh received his bachelor's degree in agricultural education from Iowa State University and holds a master's degree and doctorate in soil science from the University of Wisconsin.



Administrator McPherson holds the Bible while Leo Walsh (center) and Paul Findley, who was reappointed to a second term, take the oath of office as members of BIFAD.



**CDIE
DEVELOPMENT
REVIEW**

INFORMATION PLANNING SERVICE

"Information is critical to making sound decisions about development projects and programs," says Haven North, associate assistant administrator of the Center for Development Information and Evaluation (CDIE). "Experience has taught us that unless the information requirements of a project are treated as an integral component of its overall design, management's needs are not met."

Inadequate information planning could result in collecting too much or the wrong types of data or using methods that are too complicated, costly or time-consuming, says North. If a project's information needs are not considered in its planning stages, critical institutional capacities for data-related activities might be overlooked, funding or technical assistance might be insufficient or other shortcomings might undermine the project.

CDIE and other evaluation offices have encouraged project designers to give more attention to information requirements at the planning stage. The center soon will issue standards requiring an information plan for all new AID projects. In general, a thorough evaluation of a project's information needs should review:

- Data required to answer key management questions and meet project objectives;

- Purposes for and users of the information;
- Data sources;
- Flow of information between data collectors and managers;
- Institutional arrangements;
- Staffing, training and costs; and,
- An evaluation schedule.

"Better information planning will help avoid the most common problems that have adversely affected management, monitoring or evaluation of projects in the past," North contends.

CDIE provides technical assistance for information planning to AID offices in Washington, D.C., and overseas. North says that both CDIE and those receiving this guidance have benefited, and the center will continue providing this assistance in selected cases.

To meet the growing demand for information and evaluation specialists in the Agency, five private firms have been retained recently to assist AID missions and bureaus in designing projects and evaluating information systems. These firms also can be used for interim and final evaluations.

The five firms that have been awarded indefinite quantity contracts for these services are Checchi and Company/Louis Berger International, Inc., Development Associates, Inc., Devres, Inc., Management Systems International and TVT Associates.

—Chris Hermann

Private Sector Offers Key to Economies

AID An agreement with Westpac Banking Corporation to establish a lending facility designed especially for small and medium-size enterprises throughout the Pacific was signed by Neal Peden, assistant administrator of the Bureau for Private Enterprise, at the Suva mission.

The small business sector is an important key to diversifying island economies and thus avoiding continued dependence on a small output of traditional products and services.

Under the agreement with Westpac, AID shares one-third of the risk of the \$6 million lending pool. Loans will be short- to medium-term, with the average loan under \$25,000. In addition, \$1 million of the pool is set aside for larger projects—up to \$250,000 per project—that have especially strong development punch.

Westpac plans to work closely with borrowers, offering counseling on good business practices and addressing the lack of management skills, which, along with under-capitalization, is a main cause of business failure in the islands. AID's Suva-based regional mission will provide training funds.

PRIVATIZATION CONFERENCE HELD IN FIJI

"Privatization offers a way to energize the private sector so it can innovate and produce and create wealth in order to realize a country's potential," said Assistant Adminis-

trator Peden. "While the Pacific nations face a number of economic problems, the region is bursting with potential."

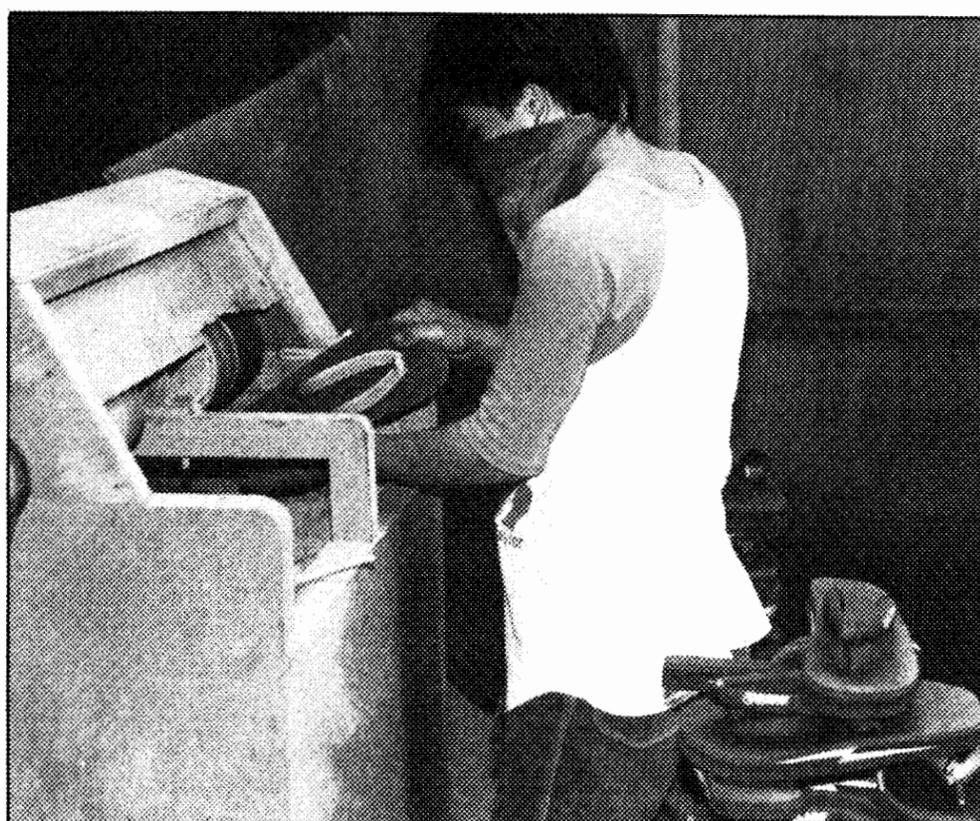
Peden was speaking at the first AID-sponsored regional conference in Fiji, Feb. 2-6, which was specifically tailored as a follow-up to the Agency's 1986 International Conference on Privatization.

Over 150 delegates from government, business and the financial community of 15 Pacific island nations and the United States attended the conference, which was co-sponsored by the Bureau for Private Enterprise (PRE) and the South Pacific Regional Development Office in Suva, in collaboration with the Interior Department's Office of Territorial and International Affairs.

"I believe the fact we are all gathered here for five days to talk about privatization demonstrates a broad consensus among us that market forces—not government bureaucracies—are what truly propel growth," the assistant administrator told delegates on the opening day. "This fact has been proven time and again, and nowhere more clearly than in Asia and on the Pacific Rim."

Peden noted that AID's regional office in Fiji under William Paupe has moved quickly to respond to AID/Washington's call for regional and country-specific follow-up in the wake of the 1986 conference.

Themes developed at last year's international conference in Washington, D. C., were given regional application in Fiji and



The small business sector is an important key to diversifying Pacific island economies and avoiding continued dependence on a small output of traditional products and services.

related to problems faced by Pacific nations.

Speakers included Prime Minister Ratu Sir Kamisese Mara of Fiji and Assistant Secretary of Interior Richard Montoya. Twenty business and financial experts shared their privatization knowledge and covered topics such as: techniques of divesting and marketing state enterprises; privatizing public services; the politics of privatization; leasing and contracting of public services; employee stock ownership programs; role of capital markets; labor and employment considerations; deregulating

market and commodity boards; and developing a country privatization strategy.

At the conference Peden also noted that PRE is joining the Suva mission in supporting the Asia-Pacific Development Planning Institute of the University of Hawaii.

This program provides short-term intensive training for development planning officials in the Pacific. PRE's involvement includes a \$20,000 grant for scholarships and development of a privatization module for the program.

—Doug Trussell

Biological Diversity From page 9

Strategy developed in 1980 by the International Union for the Conservation of Nature and Natural Resources in coordination with the World Wildlife Fund and the U. N. Environment Program," says Kux.

In Nepal, for example, AID is helping launch the first major environmental data gathering and analysis effort in the country. The strategy when completed later this year will examine the present resource situation in Nepal and present a conservation action plan.

"The preparation of the strategy involved some 40 Nepalese experts from private agencies as well as government organizations," Kux stresses. "Village, district and regional meetings were held in representative areas of the country, bringing villagers, tenant farmers, landowners, industrialists, farmer and women's organizations as well as youth clubs into the process."

Conducting an inventory and monitoring biological resources are important to maintain biological diversity, particularly in vulnerable areas. A recent AID contract with the Florida State Museum, for example, produced an eight-volume inventory of the parks and a national parks management or "stewardship" program for Haiti.

Haiti is among the nations most seriously affected by deforestation. In 1950, 80% of the country was covered by forest. Today less than 8% of that cover remains. "It was, therefore, particularly significant that in 1983, 10 sites were officially declared national natural parks," says Hester.

These parks include the Parc National de la Visite and Parc National Pic Macaya—both 2,000 hectares in size and reservoirs for numerous endemic species. Pic Macaya also harbors watersheds of four important Haitian rivers.

AID also is working to help foresters and botanists in Ecuador study and manage humid tropical forests by conducting a dendrological and economic botany study of selected sites in the forests of the Amazon region of the country. The dendrological study has collected some 5,000 Amazonian trees with an estimated 70% representing species not previously recorded in this biologically rich area.

The economic botany project has enabled scientists from the New York Botanical Garden's Institute of Economic Botany to identify plant sources for medicine, fine woods, fuel, fiber, food and food additives. More than 300 species of medicinal and fish poison plants used by Quechua and Shuar Indians

have been collected. Some of the more important have been sent to U.S. laboratories to be analyzed for anti-tumor use and other applications.

"We are providing the National Cancer Institute with some of the data that we have gathered under the AID project," says Michael Ballick, assistant director of the Institute for Economic Botany.

An AID-supported effort with the Missouri Botanical Garden in Peru has resulted in the identification of the *Tabebuia impetiginosa* tree previously unknown in the Huallaga Valley. "It has achieved prominence as the source of a bark now being widely considered a potential cure for some cancers," says Alwyn Gentry, associate curator at the Missouri Botanical Garden. Several scientific studies have shown that active properties of the bark are effective against some forms of cancer in laboratory rats and mice.

For conservation efforts to be effective, institutions for environment and natural resource management must be set up or strengthened in developing nations. Leaders, specialists and teachers must be trained. Environmental laws must be enacted and enforced. AID is actively working toward this goal both in the public and private sectors.

Among the successful AID efforts in institution building has been support for the Fundacion Natura in Ecuador. "This group is among the most active in conservation in Latin America," Hester says. "It has been particularly effective in public education and in crafting environmental legislation in that nation."

The foundation has conducted seminars for journalists and community leaders. Several successful radio shows were created using innovative approaches to environmental broadcasting. A series of posters for schools, a monthly newsletter, environmental comics for children, regular television spots and clips for movie theaters as well as books on the endangered species of Ecuador and the birds of the Quito Valley have been developed. Working with the Ministry of Education, Fundacion Natura prepared a teacher's guide for grades one through six integrating environment into the country's science curriculum.

"The maintenance of our planet's biological diversity is a fundamental problem," says Cohen. "We have come a long way in dealing with the issue in a relatively short period of time. Our commitment, however, is for the long term, and we will meet it."

Scriabine is a former deputy assistant administrator in the Bureau for External Affairs.

Initiative Builds to Solve Shelter Problem

The Housing Guaranty (HG) Program is AID's primary means of providing capital assistance to developing countries to meet the needs of low-income populations for shelter and related urban services. Through the program, AID guarantees the loans of private U.S. banks, insurance companies, pension funds and savings and loan associations in the long-term financing of basic shelter and infrastructure for low-income families in the developing world. Through September 1986, more than \$2 billion had been authorized through the HG program for projects directly in 41 countries and through two regional development banks.

To learn more about the program and the Agency's priorities in the housing sector, Front Lines interviewed Peter Kimm, director of the Office of Housing and Urban Programs.

Q. In what ways does the Housing Guaranty Program differ from most other government programs?

A. Probably the major distinguishing feature is that the program has limited impact on the federal budget. Our role is to guarantee loans made by the U.S. private sector; we do not provide direct government loans to developing countries. In addition, our operations are largely supported by loan fees paid by the borrower.

The HG program is also one of the first public-private sector partnerships in the federal government. By working closely with private sector investors who provide financing for shelter projects, AID has developed a program that has many characteristics of private market transactions. It also provides an example to developing countries of the importance of the private sector role in financing housing.

Q. What is AID's primary objective in the shelter area?

A. The availability of decent housing for the growing number of urban residents in developing countries is a major factor in their ability to contribute to national productivity and economic growth.

Although specifics of AID's program vary from country to country, its overall purpose is to help developing countries solve their shelter problem. The role of a donor is to assist and accelerate the process by which developing countries sort out

the issues and are able to make the right decisions themselves. We can't make the decisions for them. But because of the experience we've had elsewhere, we can help them to sort out their problems in a much shorter period of time than might have been the case otherwise.

The Agency offers both financial and technical assistance. And, although AID finances projects, the projects are by no means the end. They are a means by which we hope to help set in place systems that will solve the housing problem.

Producing shelter itself is not AID's primary goal. The Agency's focus is on entering into policy dialogue with the recipient countries so that policies can be established that will lead to their self-sufficiency in meeting their housing needs.

Q. How critical an issue is housing in the developing world?

A. A few basic facts illustrate the scale of the problem. Cities in developing countries grew by 350 million over the past decade, and we expect urban populations to double over the next 20 years. About 40% of the urban population lived in squatter communities in 1981. That will grow to nearly two-thirds by the year 2000. And by that time, developing countries are expected to contain 284 cities of over one million people.

This rapid urbanization is creating unprecedented pressure for shelter and related community services, and governments everywhere are confronting these enormous needs with limited financial resources and



Peter Kimm: "We have learned over the years that it is possible, with the resources that are available, for every family to have some sort of minimally acceptable shelter."

shortages of technical and managerial skills.

Q. What traditionally has been the role of government in these countries in providing shelter?

A. In trying to provide adequate shelter for their people, many governments have adopted policies that have actually impeded the provision of low-cost housing on the scale needed.

They have tended to build housing at standards beyond which the government and the people can afford. Such housing is viable only through subsidy. The result has been a lot of scarce government resources expended to provide shelter for a relatively few, rather than using government funds for putting in infrastructure such as water systems and roads. By enforcing these high standards, governments have forced low-income families into squatter settlements where minimal health and sanitation needs are not met.

Government housing efforts also have often included setting a ceiling on interest rates, which has the ultimate effect of reducing the flow of credit for housing. Again, the poor are squeezed out and forced to borrow at the very high interest rates of the informal sector, such as moneylenders.

Finally, many of these governments have been too involved in all aspects of shelter provision as direct lenders, developers and builders. The lack of free market forces that discipline private sector actions creates enormous inefficiencies.

Q. What specific changes in this approach is AID encouraging?

A. Basically, the approach we're talking about is that individual initiative and the initiative of the private sector will solve the housing problem, if the governments create a climate and framework that permit these to function properly and

efficiently. Through policy dialogue with borrowing countries, AID works to help them do this.

Specifically, we are urging governments to lower building and infrastructure standards, allow interest rates to float to market levels and rely as much as possible on the private sector and the individual homeowner to finance and build houses.

Q. How does AID support the involvement of the private sector in developing countries in providing shelter?

A. In addition to promoting private sector involvement in the development and construction of housing projects, much of the Agency's effort has focused on helping to create private sector financing institutions in developing countries. We encourage recipient governments to lend the local currency funds they receive through AID's program to private sector institutions, which then become the primary mortgage lender and loan servicers.

Q. And, where does the individual fit into this strategy?

A. More and more, AID is encouraging governments to rely on the initiative of homeowners to provide their own shelter. Rather than providing government-built, high-cost finished homes, we promote shelter solutions that allow for individual self-help.

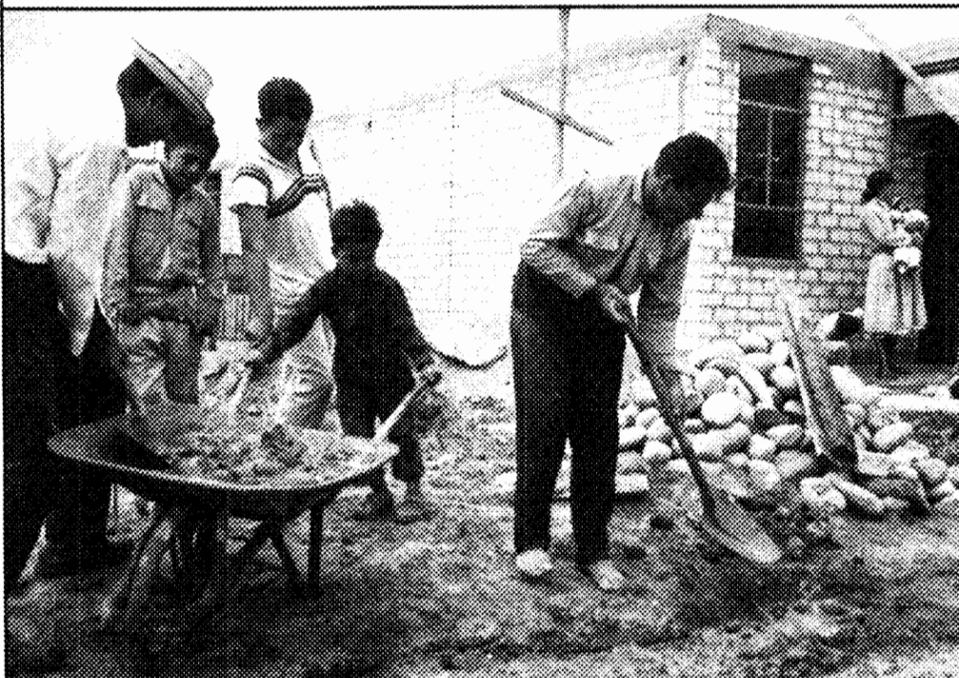
For example, core houses or "piso-techo" (literally, floor and roof) projects in Central America provide minimal shelter to the purchasers but enable them to add rooms or other improvements as their resources allow. In sites and services projects, the individual buys only a small plot of land that has water and sanitation facilities. The buyers then arrange for construction as they can afford it. Often, construction or building material loans are made available to help them.

Q. Are there examples that indicate that AID's dialogue on housing is effective?

A. One good example of a shift in government policy is Panama. In the 1970s, the government of Panama subsidized interest rates on government housing loans, loan collection rates by the National Mortgage Bank were low, and rent control discouraged private sector involvement. U.S. building standards were applied to construction, increasing costs and making homes unaffordable for lower-income families.

AID's policy dialogue has encouraged the government to make a number of positive changes. These include increasing interest rates on housing loans to 12%; restructuring the National Mortgage Bank to be more independent of government control; and enacting legislation to create privately-owned savings and

(continued on page 15)



AID is encouraging governments to rely on the private sector and the individual homeowner to finance and build shelter.

MOVED ON

Richard Caldwell, Senegal
 Anne Delcastillo, Honduras
 Norma Doig, M/SER/OP/O
 Diane Figueredo, El Salvador
 Patricia Flower, M/PM/PP
 Dale Graham, FVA/PVC/ITA
 Dale Harpstead, BIFAD/S/IHR
 Morris Hilf, Egypt
 Helen Hong, M/SER/IRM
 Debra Kreutzer, Haiti
 Meridith Larson, LAC/CAP
 Julian Mansfield, PPC/MFI
 D. Samantha McAskil, M/PM/
 CSP/SER
 Candy Mirrer, Bolivia
 Julia O'Connor, ANE/TR/HR
 Donald Osburn, S&T/AGR/EP
 Ivory Annyce Patterson, LAC/
 DP/DPD
 Jacqueline Pride, M/FM/WAOD
 Kellan Quinlan, AA/XA
 Sandra Reinhardt, PRE/PR
 Judith Ross, M/PM/EPM
 Lester Paul Snyder, M/SER/
 OP/W/CO
 Stanley Staniski, XA/AVP
 Laura Theis, S&T/H
 Desiree Thompson, S&T/IT/PE
 Karen Warder, M/PM/R
 Matthew Venzke, IG/SEC
 Terri Wallace, FVA/PVC/ITA
 Julia Williams, FVA/FFP/PCD
 Ruth Wilson, ANE/TR/ARD
 Mary Wood, IG/PSA
 Kathy Wynn, M/FM/PAFD
 Joy Young, M/PM/PP
 Rita Loretta Young, AFR/EA/ED

PROMOTED

Aldona Affleck, S&T/EN,
 secretary typist
 Dana Andrea Alexander, ANE/
 TR/ARD/APNE, clerk typist
 Joanne Beamon, ANE/PD,
 secretary typist
 Mildred Beasley, M/PM/PMC,
 position classification specialist
 Lance Butler III, M/SER/OP/
 COMS, clerk typist
 I-Ming Chang, M/FM/PAFD/
 NPA, operating accountant
 Juanita Covington, AA/PPC,
 secretary stenographer
 Audrey Doman, M/FM/WAOD/
 OADC, financial management
 assistant

**WHERE?
IN THE WORLD
ARE AID EMPLOYEES**

Shirley Erves, AFR/DP/PAR,
 economist
 Joyce Fuller, M/FM/PAFD/PA,
 accounting technician
 Sylvia Rebecca Graves, IG/RIG/
 A/W, information analyst
 Judith Hawkins, M/FM/BUD,
 secretary typist
 Deborah Ann Hymes, M/PM/
 PP, secretary typist
 Joanne Karppi, LAC/CAR,
 secretary stenographer
 Lisa Lawson, M/SER/OP/O/
 AFR, clerk stenographer
 Sallie Mahone, S&T/N, program
 analyst
 Howard Miner, Indonesia
 William Outlaw III, XA/PR,
 public affairs specialist
 Paulette Prestwood, S&T/EY,
 secretary typist
 Jean Best Washington, M/FM/
 PAFD/PA, operating accountant
 Marcella Watkins, M/FM/
 WAOD/OADC, financial management
 assistant
 Carmell Weathers, M/FM/
 WAOD/CAC, payroll technician
 Phyllis White, ANE/TR/ARD,
 secretary typist
 Felicia Wilder, M/PM/PMC, clerk
 typist
 Joan Miller Wolfe, PPC/WID,
 deputy director, Women in
 Development

REASSIGNED

William Granger, M/PM/R,
 supervisory personnel staffing special-
 ist, to administrative officer, FVA/
 PPM/PMS
 Leonard Jameson Jr., M/SER/
 IRM/WS, computer systems analyst,
 to data management officer, M/SER/
 IRM/MPS
 John Zeigler, COMP/FS, execu-

tive officer, to management officer.
 M/SER/MO/RM

RETIRED

Helen Andresen, AFR/TR,
 secretary stenographer, after 26 years
 Alice Appleman, S&T/POP,
 secretary stenographer, after 10
 years
 James Boone, M/FM/PAFD/PA,
 operating accountant, after 29 years
 William Busch, M/PM/PP, per-
 sonnel officer, after 21 years
 Robert Chamberlain, AFR/DP/
 PPE, program officer, after 26 years
 Dante Dantonio, M/FM/PAFD/
 PA, financial management officer
 financial analyst, after 20 years
 Betty Facey, Honduras/ENGR,
 supervisory engineering officer, after
 11 years
 Euzlear Foster, M/SER/MO/
 TTM, traffic manager, after 35 years
 Remo Ray Garufi, COMP/FS/R/
 AIDW, mission director, after 28 years
 Elsie Goodridge, Pakistan/D,
 secretary, after 27 years
 Gerald Gerhard Graf, AFR/DP/
 PAB, supervisory program officer,
 after 20 years
 John Hafenrichter, Niger/GD,
 human resources development officer,
 after 20 years.
 Dwane Hammer, COMP/FS/R/
 AIDW, agricultural development
 officer, after 24 years
 Allen Hankins, Pakistan/ARD,
 supervisory agricultural development
 officer, after 30 years
 Roy Harrell, COMP/FS/R/
 AIDW, program officer, after 24 years
 Nathaniel Hawkins, M/FM/
 WAOD/FS, voucher examiner, after
 20 years
 Wilbert Holcomb, PRE/PD, spe-
 cial projects officer, after 29 years

Jane Kilburne, IG/RIG/A/W,
 secretary stenographer, after 8 years
 Mary Leggins, M/SER/MS/
 EMS, administrative officer, after 30
 years

Yu Chaing Ling, M/FM/ASD,
 systems accountant, after 8 years
 Erven Long, SAA/S&T, senior
 advisor for university affairs, after
 27 years

William Mashburn, M/SER/
 MO/TTM, supervisory executive
 officer, after 24 years

John McCarthy Jr., ANE/DP/
 PA, program analyst officer, after
 29 years

Anna Medley, S&T/EY, program
 operations assistant, after 11 years

Albert Mercker Jr., FVA/FFP/I,
 international cooperation specialist,
 after 21 years

Henry Miles, ANE/EA/ISP, pro-
 gram officer, after 18 years

Frank Nathaniel, M/SER/MO/
 RM/PPM, supervisory general sup-
 plies specialist, after 34 years

William Oldham, Egypt/HRDC/
 H, supervisory health development
 officer physician, after 21 years

Theresa Proctor, LEG/OD,
 administrative operations assistant
 stenographer, after 23 years

Edward Rice, ANE/TR/ARD/
 RSEA, agricultural development
 officer, after 20 years

Viola Steward, M/FM/PAFD/
 PA, accounting technician, after
 29 years

Joe Stockard, AFR/TR/HPN,
 medical officer, after 11 years

Joe Tucker, M/SER/MS/OM,
 supervisory executive officer, after
 25 years

Antonio Velasquez, LAC/DR/
 CP, credit guaranty specialist, after
 12 years

Donald Walls, M/FM/CONT,
 financial management officer, budget/
 accounting, after 21 years

Clara Whalen, S&T/IT/PP, par-
 ticipant training specialist, after
 32 years

Harry White, M/SER/OP, con-
 tract specialist, after 13 years

John Yang, RDO/C/CONT,
 financial management officer, budget/
 accounting, after 22 years

Years indicate AID service only

Shelter

From page 14, column 4

loan associations. Last year, AID authorized a \$25 million HG program that will channel funds directly through the private sector. This is a major achievement in using local, private sector resources to finance low-cost housing.

Tunisia is another country where we have contributed to an improved shelter policy. Through our policy dialogue, the Tunisians have increased their efforts to achieve cost recovery in the shelter sector. This is a basic prerequisite to expanding the supply of shelter services. Last year, they increased mortgage interest rates from 4.5% to 8.25% to stimulate the development of a viable housing finance system and increased the credit available for housing. Sewerage

tariffs were increased by 35% in 1984, and then by another 15% in 1986. These tariff increases will make it possible for thousands more families to be served by the sewage disposal system.

The government of Tunisia also has placed a higher priority on low-cost housing and has accepted both sites and services and self-help construction as preferred strategies. They are using \$15 million of HG resources for new programs that will finance the development of urban land by the private sector and will provide direct loans to low-income families for the purchase of land for housing. These initiatives will enlist the private sector in the effort to increase the supply of serviced land for low-cost housing plots.

Q. In general, how well is AID's message being received?

A. When we first started talking this way, in effect we were saying, "Stop subsidizing." "Provide less product, fewer amenities for each beneficiary, but provide some amenities to a much larger number of families." Initially, this message was not well received. But today there is a consensus at the technical level on the principles AID espouses. By technical level, I mean the people who have technical responsibilities in government and in the private sector. Of course, there are very difficult compromises to be made because there are people who benefit from the existing system. And, the fact that there is consensus on the principles doesn't immediately result in agreement on the courses of action.

Q. How would you summarize the philosophy and approach of AID's housing policy?

A. The most important message is that the urban and shelter problems of the world are upon us. They won't go away, and they can't be ignored. Everyone with responsibility in government and the private sector, as well as every family, has to focus their energies on the problems. We don't have to urge the families; they will take the initiative themselves. It's the institutional part of society that has to be focused.

We have learned over the years that it is possible, with the resources that are available, for every family to have some sort of minimally acceptable shelter. For this to happen, both the government and the private sector must work together. We have learned that the real key to the housing problem is the energy and efficiency of the people themselves, and a sound government policy should support this.