

# PEACE CORPS TIMES

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Food for Peace in

September-October 1987

# From the Director

In my conversations and Q and A sessions with Volunteers around the world, an often asked question is, "How does Peace Corps allocate its resources?" The question is simple but the answer is complicated because of the long and extended budget process of the United States Government.

I will begin by saying that over 70 percent of the Peace Corps budget is spent on overseas operations—direct Volunteer support. The process of determining how it is divided is a long and complex one, further complicated by world conditions, i.e. coups, instability, inflation, natural disasters and so forth overseas, and recession, budget deficits and budget cuts at home.

Each country staff makes a Country Management and Program Budget (CMPB). The CMPB is based on funding for the current year and projections for the next year which reflect the host country's support of our programs, development priorities and requests for increases in Volunteer numbers.

Included in the CMPB are projections for the Volunteer living allowance. (As many of you know, this can change, though I regret to say, as many of you have pointed out, "too slowly.") The countries then submit their budgets to their respective regions.

The regions—Africa, Inter-America and NANEAP—work out their total funding needs, based on country budgets received and other considerations such as new country entries and new programming. These budgets are then presented to International Operations, which, as I stated, accounts for more than 70 percent of our funding.

This plan is combined with the remainder of Peace Corps' projected outlays which include recruitment, placement, training, medical services, legal services, private sector outreach, special services, support staff, Volunteer readjustment al-

lowances and, in general, all domestic operating costs.

Peace Corps must prepare its budget at the level set by the Office of Management and Budget (OMB). Here we compete with all the other federal agencies. OMB sends our budget to the Congress for approval. Members of the House and Senate Budget Committees review our projected costs for the coming year and decide how much money will be allocated to Peace Corps in relation to the total budget of the United States.

Rarely does any agency's budget pass unamended through the Congress and this nearly always means cuts. (However, I am proud to say your work is being recognized as more and more important and cost-effective.) During the budget process, Peace Corps works closely with the committees to explain and if need be, fine tune, our budget. Eventually, the Congress approves a budget for Peace Corps and appropriates funds accordingly. We adjust our budget, either up or down, depending on monies appropriated.

All of Peace Corps' activities are dependent on the availability of funds, not the least of which is new country entries. That is why after country agreements are signed and extensive plans are made, it is often a year or more before Volunteers are actually placed. Budgets must be agreed upon and funds in hand before a single Volunteer steps off the plane.

I'm sure that you feel, as I often do, that we always need more—more funds to do our work. But things are looking up. As we reported in a previous column, Peace Corps now has its own oversight subcommittee in the Senate presided over by RPCV Senator Chris Dodd. And, we have our Congressional mandate to increase the number of Volunteers in the field over the next five years.

Progress is being made on all fronts and

it is due, in large part, to current and former Volunteers who have established their effectiveness in promoting world peace and friendship, an effectiveness that our country proudly supports.

Sincerely,



Loret Miller Ruppe  
Director of the Peace Corps

Upcoming country features will include Belize, the Cameroon, Botswana and even as you are reading this the Volunteers in the eleven island nations that make up the Eastern Caribbean are taking pictures for their photo story.



## Peace Corps Times

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### CONTENTS

<b>From the Director</b> .....	2
<b>Letters to the Editor</b> .....	11
<b>Country Feature</b>	
East Africa—Tanzania .....	4
<b>Development Education</b> .....	10
<b>Life After Peace Corps</b>	
Job Information .....	13
Fellowships .....	14
<b>Features</b>	
Photo Contest .....	11
Into Africa with Public Affairs .....	12
<b>ICE Almanac</b> .....	15

# New Overseas Staff

## Country Directors

### Jennet Robinson

RPCV Jennet Colbert Robinson has been named Country Director for the African nation of Swaziland. Robinson first served Peace Corps as a Volunteer in Afghanistan, 1976 and 1977, where she was a communications consultant to the Ministry of Health. For the past year she has been the Public Information Director for the South Carolina Budget and Control Board. From 1980 to 1983, Robinson was the press secretary for South Carolina's Lieutenant Governor and later was named Deputy Lieutenant Governor. Prior to her service with the State of South Carolina, she had been in the news media there and in California as a producer and reporter.

### Donald Odermann

Californian Donald Odermann, a PCV in Colombia from 1963 to 1966, has been posted to the Dominican Republic as Country Director. Odermann has bachelor's degrees in Spanish and international management from Santa Clara University and a master's in Latin American studies from UCLA. A former stockbroker and investment banker in San Jose, in 1981 Odermann founded the Latin Athletes Education Fund to offer scholarships to Latin American baseball players to U.S. colleges. The Fund has since broadened its program to other sports including swimming, volleyball and tennis and has received much international publicity.

### New Country Staff

Anne Dodge, RPCV/Tunisia and Cameroon, 1972 to 1975, has been named APCD/Programming and Training for Niger. In addition to her Peace Corps experience, Dodge has worked in various positions in Somalia, Chad, Italy, Canada and Western Samoa. She holds a master's degree from the School for International Training in Vermont and has completed coursework for a doctorate at the University of Massachusetts.

\* \* \*

Cynthia Robinson, RPCV/Senegal, 1978 to 1980, is the new APCD/Program and Training Officer for Senegal. She has worked as program manager for AID's Food for Peace in Senegal since 1984. She has had other health related positions in The Gambia and Senegal. Robinson earned her B.S. in nutrition at the University of California at Davis.

\* \* \*

Janelle Gamble, RPCV/Kenya, will be the new APCD/Education in Sierra Leone. Prior to her assignment there she worked for CARE and UNICEF in Uganda and has designed a training manual for health programs in East Africa. Gamble holds a master's in educational technology from San Francisco State University.

\* \* \*

William Courtney, RPCV/Philippines, 1981 to 1984, has been named the new APCD for Region IV in those islands. Courtney earned his B.A. in political science at the University of North Carolina and his master's in public administration from North Carolina State. While there he was a Peace Corps recruiter for two years.

\* \* \*

Scott Smith, former Overseas Staff Training Coordinator at Peace Corps/Washington, is now an APCD in Kenya. A graduate of the University of Maine, he received his master's degree in international development management from American University. Smith was a Volunteer in Niger from 1979 to 1981.

\* \* \*

David Levin, who also served as a PCV in Niger, has returned there as the APCD for Agriculture. Prior to this appointment, Levin had served as the Country Desk Officer for Zaire, Central African Republic, Rwanda and Burundi in Washington. A graduate of Haverford College, he also holds a master's degree in genetics and plant breeding from the University of California at Davis.

### Host Country Staff

Luis Mata has been APCD/rural housing and cooperatives in Costa Rica since October 1985. An exchange student in the United States, he graduated from high school in Connecticut in 1974. He earned his B.A. in business administration from the University of Costa Rica. He worked in several financial institutions in Costa Rica until he began with Peace Corps two years ago.

\* \* \*

Amelia Catanasiga, Administration Officer/Fiji has been working for Peace Corps for the past 14 years. She began in 1973 and worked her way through the ranks of secretary, clerk, cashier and admin assistant. She was appointed to her present position in July 1986.

\* \* \*

Adi Tafuni has been Administrative Officer for Western Samoa since February 1986. She studied computer programming in New Zealand and has worked as a data controller overseeing the computer operations.

\* \* \*

John Bungitak has been the Administrative Assistant for the Marshall Islands since 1986. He joined Peace Corps in 1982 and prior to that was an elementary teacher. He completed four years of study at Xavier University in the Philippines in 1978.

\* \* \*

Joanne Unga has been the Administrative Assistant in the Solomon Islands since 1986. In 1979 she joined Peace Corps as secretary to the Country Director in the Solomons and was promoted to cashier in 1983. This is her first trip to the United States.

\* \* \*

The above attended the recent Overseas Staff Training event in Washington, D.C.

## Queen Honors APCD Van Keane

Van Keane, APCD/Eastern Caribbean has been awarded the Order of the British Empire by Queen Elizabeth II of England. The announcement was made in the Queen's Birthday Honors List.

Keane, a native of St. Vincent, received the medal for services in the advancement of education on St. Vincent, a British Commonwealth nation. The title, Officer of the Order of the British Empire, was bestowed on Keane specifically for his work in the advancement of teacher education.

Keane joined Peace Corps as an APCD more than fourteen years ago following an illustrious thirty-five year career in the St. Vincent and Grenadines' Civil Service. After serving as a teacher and Chief Education Officer, he retired as Chief Education Permanent Secretary of the Ministry of Education and Health in 1972. During his tenure, Keane took the lead in the advancement of the Teacher Training College and the Technical Training College on St. Vincent.

Over the course of his service with Peace Corps, he has literally been responsible for the support of more than 1,000 Peace Corps Volunteers. This year Keane was promoted to the position of Senior APCD in the Eastern Caribbean. He also received a cash award for his sustained superior performance.

## Former Staffer In Astronaut Program

Former Peace Corps physician Mae C. Jamison, 30, of Los Angeles, is one of fifteen people NASA has selected for the newest class of astronaut trainees.

Jamison was based in Sierra Leone from January of 1983 until May of 1985. In addition to her medical degree, she holds a degree in chemical engineering.

# Focus — Tanzania

## About the Country...

Population: 21.7 million (mainland),  
Zanzibar 600,000

Land Area: 363,950 sq. miles (mainland),  
640 sq. miles Zanzibar

Cities: Dar es Salaam (capital),  
Dodoma (future capital) and  
Zanzibar Town

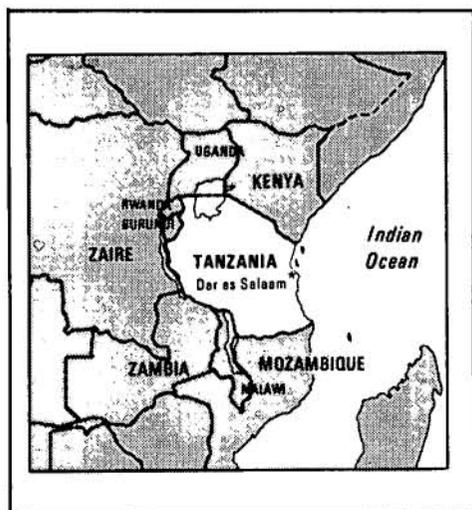
Languages: Kiswahili (official), English

Religions: Muslim, 35%; traditional  
beliefs, 35% and Christian,  
30%

Climate: Tropical to arid to temperate

While the discovery of the fossil remains in the northern part of the country suggest Tanzania may have been man's earliest home, possibly a million years ago, there are many gaps in the knowledge of the country's past. Generally, it has been a history of intermingling and intermarriage between ethnic groups who migrated to the region. During the Stone Age, Tanzania, like much of southern Africa, was inhabited by Bushmen. About 1,000 B.C., people came from Ethiopia and Somalia and moved into the northern highlands. It is believed that the Bantu, who were agriculturists, absorbed or displaced most of the earlier tribes although some retained their own identity. Among the best known of these is the Masai cattlemen.

As early as the 12th century, Arabs, Persians and Indians had established a flourishing trade industry in the coastal areas. By contrast, the Bantu controlled the interior until the mid-nineteenth century



The June class of education Volunteers—Technical trainer Mathias Kanyebele, Tom Traexler, Ann O'Connell, Steve Willard, Pat Keegan, Jean Gluesing, Karen Preston, Raminder Sandhu, Elaine Moss, Bruce Sears, Suzanne Van Dam, Thomas Van Dam, Tom Ventimiglia, Ben Bricker, Bill Schmidt, Country Director James Lassiter and Ken Moss.

Photo—USIS Thomas Mweuka.

when Arab slavers and European explorers and missionaries arrived. The country was the site of the much publicized search by journalist Henry Stanley in 1857 for Scottish missionary David Livingston.

Through a series of treaties, the Germans took over the administration of the country and held it until the end of World War I, when it passed to the British under the League of Nations mandate. At the end of World War II, Tanganyika (as the mainland was called then) became a United Nations Trust, also under the British. Full independence came in 1961. The island of Zanzibar, long an Arab trading center and famous for its spices, gained independence, also from Great Britain, in 1963. In 1964, Tanganyika united with Zanzibar to form the United Republic of Tanzania.

### Peace Corps/Tanzania

Tanzania was gaining independence at the same time Peace Corps came into being and the new country was one of the first to invite Peace Corps to its shores. The first groups of Volunteers, in 1961, went to Colombia, Ghana and Tanzania. That first year the call was for engineers, surveyors and geologists to help the country improve its infrastructure.

As with most Peace Corps countries the programming trend has changed. Now the emphasis is on rural development. Towards this end, Peace Corps is helping the

government in such areas as crop production, grain storage, fisheries and women's cooperatives. Another concern is general health services on the islands of Zanzibar and Pemba where PCVs are working with officials in the areas of immunization and occupational therapy.

The secondary education program is a major initiative for Peace Corps/Tanzania and has the potential for the most growth. As with most countries today, Tanzania has a shortage of math and science teachers. However, the Ministry of Education is action-oriented and recognizes the critical role math and science education must play in continuing development and is moving forward to alleviate the problem. Currently about one-third of the PCVs in Tanzania are involved in secondary education and five are lecturing in physics and math at the University of Dar es Salaam and Karume College, Zanzibar.

Fish farming has been instituted in the rural areas to help offset the lack of vitamins and protein caused by a scarcity of fresh fish. Nearly 20 Volunteers are working the fisheries program.

About 35% of the grain produced in Tanzania is lost due to pest infestation, in transit or from inadequate storage. Peace Corps/Tanzania's grain storage project emphasis is to minimize losses, improve small farmer grain storage and to train farmers in the use of insecticides. Since grain storage is essentially a post-harvest activity, Volunteers are

# Focus — Tanzania

involved in community development throughout the year. The agriculture Volunteers, which number about 14, also work in the areas of soil improvement, pest management and crop rotation.

Two Volunteers are working with rural women's cooperatives in product improvement and enhancement of management and operation skills.

Zanzibar Omnibus—Since 1982, Volunteers have been working on Zanzibar with the Expanded Program on Immunization. This program's goal is to immunize all children on Zanzibar and Pemba to reduce infant mortality. One PCV is a mechanic who supervises maintenance on 60 vehicles for the Malaria Eradication Project. Another Volunteer is an occupational therapist who works with the handicapped. Still another, a home economist, works with women's groups under the auspices of the Department of Adult Education and the Union of Tanzanian Women.

Peace Corps/Tanzania fields a contingent of about 50 Volunteers. The following are stories about and by the Volunteers and their work.

## Kevin Hopkins

Kevin Hopkins, an agriculture man from Lawton, Oklahoma, has successfully transplanted his skills to the villages of Tanzania. He is assigned to the Ministry of Agriculture's District Development Office and based in the Ileje District which borders on Malawi and Zambia. His task—to help introduce a new program, sunflower seed production. In addition to its nutritional value, the sunflower provides a cash crop in the lowlands where mostly maize, beans, cassava and sweet potatoes are grown.

The first year, he worked with eleven ujamaa villages where all farming was done by hand. With the help of his counterpart, he held seminars to introduce the principles of sunflower agronomy and the processing of seeds into oil. Until the sunflower project was begun, cooking oil was virtually unavailable in the villages.

Since October of last year, Hopkins has supervised another project, the introduction of a high-yield, disease-resistant variety of wheat. Together with a district Farm Inputs Officer, he worked on a grain storage warehouse construction project, a self-help effort partially funded by AID.

In addition to his major projects, he grows a half acre of maize and raises his own vegetables. Prior to his Peace Corps service Hopkins was a custom wheat harvester, worked for the U.S. Forest Service, herded sheep in Idaho and worked on a kibbutz in Israel.

## Jeff Nalle

My work is with a school maintenance project in the western part of Tanzania. Under the auspices of Danida, a Scandinavian aid organization, we are revitalizing secondary schools and colleges throughout the country.

Our area is fortunate to have about fifty local craftsmen. With materials donated by Danida and the help of the students, the schools are being rehabilitated with new roofing, ceilings, plumbing, electricity and burglar proofing. Essentially, I assist the engineer and his counterpart in distributing materials, tools and work assignments and work with the craftsmen. The project will be completed in 1992 with about 200 buildings having been restored.

Being at both ends of the project—the planning and the actual work—makes the job doubly rewarding.

Jeff Nalle

PCV Nalle is from Merced, California and is a 1985 environmental science graduate of the University of California at Santa Barbara.



PCV Jeff Nalle checks school renovation materials with counterpart.

Photo—Beth Connor

**About the Cover**—PCV Kevin Hopkins of Lawton, Oklahoma, and his counterpart survey a field of sunflowers in the Ileje District in Tanzania. Photo—USIS Thomas Mweuka.



Tanzania Staff—Joseph Paulo, Country Director Jim Lassiter, Rosemarie Taylor, Berna Kazimoto, Flora Kaaya, Regina Bachubila, Cashier Clementine Magori, Jane Emily, PCMO Edith Mpangala, Zestha Lyimo, Salum Massenga, APCD Norman Hiza, Administrative Officer Roger Conrad, Training Director Josiah Mchome and Paschal Wilbald.

Photo—USIS Thomas Mweuka.

## Beth Connor

I am assigned as an agriculture extension officer in the Nzega District. I live in a village about 20 miles from the district town, and my work is concentrated in villages within a 10 mile radius of my site, Itunda. When I arrived, my boss told me my job was to help the people. I looked for work and I found it.

Maize is the major crop in my area and storage is a big problem. In recent years, a pest was accidentally introduced into Tanzania in food aid from outside countries. The pest is called Dumuzi and it thrives on maize. The traditional methods of storing maize are ineffective against Dumuzi. A farmer can lose one third of his crop to this pest. With information from FAO I set about helping the farmers build better storage facilities along with educating them on the proper use of pesticide.

My daily work involves visiting farmers to distribute pesticide and to work with them on proper maize storage. I also hold grain storage seminars. The focus of the seminars is practical demonstration of how to build a kihenge (the traditional storage container) but with variations to prevent Dumuzi from destroying the contents. Dumuzi is prolific and can travel from farm to farm, so another important aspect of the seminars is public awareness.

I have been very encouraged by the enthusiasm with which the villagers have taken up "vita," as they call it, the war against Dumuzi.

Beth Connor

A journalist, Beth Connor is from Claremont, New Hampshire. She received her degree in communications and photography from the University of New Hampshire and before becoming a Volunteer she was with New Hampshire Public Television.

## Mary Love Sanford

Women in Development (WID) Volunteer Mary Love Sanford teaches home economics subjects to young women at Rungemba Community Development College. Upon completion of their studies these women will work for the Ministry of Community Development as Community Development Assistants (CDA's). CDA's are entry level positions leading to careers as Community Development Extensions Officers (CDEO's). CDA's and CDEO's work with village women imparting such skills as health/nutrition practices, home and business management principles, home craft skills, and improved agricultural practices. Mary is currently serving her third year as a Volunteer in Tanzania and was a key person in the establishment and redesign of the PC/Tanzania WID project.



Beth Connor and villagers examine a new kihenge, a traditional maize storage container, which has been designed to protect the grain from Dumuzi, the maize pest.

Photo—Ayerbu Rashid



WID Volunteer Mary Love Sanford (in scarf) with home economics student at Rungemba Community Development College.

Photo—USIS Thomas Mweuka



Jill Linde and her counterpart prepare district fisheries pond which is used as a demonstration and training site for local fish farmers.

Photo—USIS Thomas Mweuka

### Jill Linde

Jill Linde first began working in Ileje district in November 1985. As the district's first Peace Corps Fisheries Volunteer, her work primarily involves educating individual farmers, village officials and area school children on the advantages of fish culture.

Located in the district town of Itumba, Jill and the District Fisheries Officer, Longford Mwaijande, worked under the Regional Natural Resources Plan to construct a project which provides the district with fingerlings. This project also serves as a demonstration and training site for local fish farmers. The district pond site stresses the advantages of integrated aquaculture with local crops of rice, corn, sorghum, millet, coco yam, and livestock such as pigs and ducks.

Jill is also involved in six of the local village projects. She and two counterparts, Jangston Mtawa and Patson Ndimbwa work together in constructing village demonstration ponds and instructing village cooperative groups, local schools, and individual farmers in pond construction, maintenance, improved feeding methods, management and harvesting techniques.

Jill's other projects include gardening, teaching women to hand sew, and introducing leucaena as an alternate source of firewood, and its use in areas with high soil erosion problems.

Jill is a resident of Nampa, Idaho. She received her bachelor's degree in zoology with a minor in general science teaching from the College of Idaho, Caldwell.



Timothy Woolard and Tanzanian fisheries officials Gideon Mwakatima, Umbokege Kangele and Stedford Mwankemwa, examine fish from one of their renovated ponds.

Photo—USIS Thomas Mweuka

### Timothy Woolard

Timothy Woolard began work under the direction of the Fisheries Officer of Mbozi two years ago. As a Volunteer Fisheries Extension Officer he is responsible for maintaining and renovating existing ponds, selecting sites for new ponds and directing their construction, instructing farmers in proper management practices, and the stocking, feeding, and harvesting of fish. Working closely with Fisheries Officer, Gideon Mwakatima, and Field Assistants, Umbokege Kangele and Stedford Mwankemwa, his activities directly involve him with villages, schools, missions, and private individuals. The overall objective of the Fisheries Extensionist is to assist in providing the technical skills necessary to increase the production of fish-protein rich food, and to help the farmer supplement his income.

A biology graduate of the University of Minnesota, Woolard was with the Regional Kidney Disease Program in Minneapolis before joining Peace Corps.

# The Many Faces Of Education

## Amanda and Roger Marcus

Amanda and Roger Marcus are teachers at the Ifunda Technical Secondary School in Iringa Region. This "O" level school has 840 students and a teaching staff of 80. Foreign teachers here have, in the recent past, come from Sweden, Denmark, Russia, Holland, Germany, England, Ireland as well as the USA.

Roger is a civil engineer and teaches technical and architectural drawing. He also is the leader of the school surveying club whose members recently designed a drainage system for local roads. In his spare time Roger has taken the opportunity to help in small local engineering projects.

Amanda was recruited to help manage the school's livestock projects. In addition to this job she teaches Form I English and helped reorganize the school library.

The Marcuses attended California Polytechnic State University in San Luis Obispo. He worked with several engineering firms before Peace Corps and is a member of the American Society of Civil Engineers.

## Leo Bellantoni

Leo Bellantoni teaches math and physics at Kilakala Secondary School in Morogoro. He teaches Forms 5 and 6, which nominally correspond to the US junior college. In addition to his teaching, Bellantoni started Kilakala's Scrabble Club to help beginning students learn English and, with Second master Makonde, was vice-patron of the school's physics club. He also built a small telescope for the school. Somehow he found time to be the founding editor of Peace Corps/Tanzania's newsletter, LABDA KESHO. Looking back over his experiences, Leo said, "The Peace Corps is the greatest thing since sliced bread. Everybody should join."

Peace Corps Times would like to thank the Volunteers and staff of Peace Corps/Tanzania for sharing their experiences with us all and for their fine stories and photos. Also, thanks to USIS photographer Thomas Mweuka for assisting with the photography. To all of you—a job well done!

The November-December issue of *Peace Corps Times* will feature Volunteers in the Central American country of Belize, more photo contest winners and a special story on adult literacy in Honduras.



Leo Bellantoni explains what the dials mean to students in his physics class at Kilakala Secondary School.

Photo—USIS Thomas Mweuka



Civil Engineer Roger Marcus and students work on surveying project.

Photo—USIS Thomas Mweuka

# Bulldozing Through The Bush

Being a jack-of-all trades sure can help when you are a Volunteer. My original designation was as an agriculture extension agent but at the last moment I was re-assigned as an agro-mechanic and sent to a large irrigation project in the semi-arid region of Tabora.

When I arrived at Mwamapuli (the dam of a large man-made lake which will provide the irrigation water) I found that a surveyor was needed. So, I signed on with the survey team and began running the transit and level for them. Some Volunteers lament that there is not enough to do, but for me it's just the opposite. There is always more to do than time to do it in. I like it that way. It makes the time pass quickly and at the end of the day or the end of the month, we can point to something and say, "We've finished that, now we can go on to something else."

It isn't always easy though. Along with having a regular job to go to everyday come all the frustrations and the deadlines and the delays due to lack of spare parts and tools. You learn to make do with what you have—to make gaskets out of manila folders or washers out of a piece of scrap metal. Scarcity breeds ingenuity and I've learned that lesson well from my Tanzanian counterparts who can fix just about anything with just about anything.

However, there is only so much you can do with baling wire, especially when you are dealing with bulldozers and motor-graders and other sensitive pieces of equipment. One of my biggest challenges is to convince mechanics that it is worth the little extra time it takes to use the right tool and wait for the right spare part rather than rigging something in a way that may do permanent damage to the machine.

All in all, it is a tremendous challenge working here. It is also very rewarding because we get to see development through the eyes of the people we came to help.

*Terry Campbell*

*Terry Campbell of Illinois, is a graduate of the University of Chicago. In addition to his Peace Corps service, he served five years with the Marines. He is also a licensed plumber.*

## A Note From The Office Of Congressional Relations:

Some of you may recall filling out a "privacy release" form during staging. If you don't remember, you gave the agency permission to release limited information about your service. Congressional Relations has sent that information to Members of Congress. Should you receive a letter from your Representative or Senator



Terry Campbell and counterparts do pre-maintenance check on Caterpillar bulldozer at Mwamapuli irrigation project. (Photo—Beth Connor)



Educator Amanda Marcus supervises the livestock project at Ifunda School. She also teaches English and works in the library.

*Photo—USIS Thomas Mweuka*

commending your Peace Corps service, you now know why. By the way, we'd like to pass on a message we hear all the time from Members of Congress — Keep up the fine work; you're what makes America great!

## The Peace Corps Alternative

It's a dogma eat dogma world,  
barking up the tree of life,  
that sends to us problems hurled;  
and causes too much strife.

Here we sit atop our tree,  
and look down on those around us.  
But there's no vantage, for we can't see  
while the intolerance cloud blinds us.

Life gave you limbs, do what you can,  
climb down and help your fellow man.  
Here's something that's down to earth,  
Peace Corps, a quarter century since birth.

PCV Kevin Klein,  
Western Samoa  
FAITALA newsletter



# Questions and Answers About Development Education

Mark Twain once noted that there's considerable difference between lightning and a lightning bug. Similarly, there's quite a difference between development education and what too often passes for it in American society. "What is development education?" "How does it work?" "How do you know whether or not what you want to tell others about your Peace Corps experience is really global?"

These are some of the questions you will need to answer in order to fulfill Peace Corps' Third Goal.

## What is development education?

Very simply put, development education describes the process of increasing public awareness of the developing world. Development education is the essential flip side of the development coin. Whereas you, as a Peace Corps Volunteer, concentrate on increasing the capacity of your host country to meet basic human needs, development education focuses on the needs of the economically developed countries to understand the issues, realities, cultures, values, economies, and policies of the developing world.

## How does it work?

To be effective, development education, just as development for economic and human growth, must take a variety of forms most appropriate to the audience. Development education spans the spectrum from the passive to the active (engaging a school's student body in building and maintaining a model Liberian village). Peace Corps' unique contribution to development education in the U.S. stems from what Volunteers have learned about the developing world and how they have learned it. Volunteers bring home a message about the developing world that is filled with vitality and believability. Over the past 26 years, more than 125,000 Peace Corps Volunteers have completed their overseas assignments and returned to the United States with a wealth of firsthand experience in the developing world. While development education materials abound, PCVs have language, cross-cultural and development experiences that bring the developing world to life. By sharing the richness of their own experiences, PCVs have shown their neighbors, community clubs, school districts and work places that Peace Corps Volunteers are as valuable a domestic resource as they are a partner with the peoples of the developing world. Examples of PCVs making a difference abound:

- Inspired by their Peace Corps service, a group of returned Volunteers from New York launched a Global Awareness Program that enables inner-city high school students to spend three weeks living with a family in such

countries as Senegal, Ecuador, Cameroon and the Dominican Republic.

- The Northern California Council of Returned Peace Corps Volunteers has published a booklet and coordinated workshops on how to put together an effective audio-visual presentation.
- A film series coordinated by a group of Volunteers in northern Ohio attracted guests from around the region who viewed films produced by filmmakers from India, Senegal, Nicaragua and Bolivia. The series included accompanying music, exhibits and talks by Volunteers who had served in each of those countries.
- A Peace Corps/Philippines Volunteer, who returned to her hometown in Florida, regularly provides slide shows and talks to local schools and civic groups about her work as a Volunteer.

## How do you know whether or not what you want to tell others about your Peace Corps experience is really global?

Although specific stories about your host country may be what you feel most comfortable talking about, it's the concept of interdependence with an emphasis on how problems, choices and solutions are interconnected that makes your story global. There are specific ways in which you can assure a global focus to your Peace Corps experience.

First, try to show the linkages between your own community and your host country. For example, the clothes for sale in your community's department store are made from cotton grown in India and assembled in the Philippines. What are the linkages between the three economies? Who are the winners?

Second, show how individual human beings can make a difference. For example, what was the impact of the work provided by the village's main health provider? How does he or she compare to the health delivery system in your community in the U.S.? This approach can generate spin-off discussion topics. For example, where did health care rank on the list of your host country's national priorities? What are the trade-offs? How does this compare to the U.S. health system and the priority it receives in your local community? Who were the main actors in your village's health delivery system? Who are the main actors in your hometown?

Third, be as aware and well-informed as possible. A Volunteer not aware of the contemporary world and where his message fits in will find it difficult to inform others. Keep an eye on international news and what others are doing in the international development field. It is important to remember that as a resource, your behavior serves as a model for your audience.

Fourth, involve the community. Other

resource persons in your local community (i.e. the international studies department of your local college or university, the Chamber of Commerce, your community library, local chapters of international organizations like the YMCA or Girl Scouts, other returned Volunteers) are valuable assets.

Fifth, if you were a plumber, you wouldn't think of showing up on the job without the tools of your trade. Likewise, you'll need your own set of tools to carry out your activities. Besides the very important artifacts and pictures, the following resources make up a good beginner's tool kit for development education: *Ideas and Information About Development Education*. InterAction, 200 Park Avenue South, New York, NY 10003. This is a quarterly newsletter that is published for individuals engaged or interested in educating Americans about the importance of economic and social development in Africa, Asia, and Latin America.

*The New Global Yellow Pages*. Global Perspectives in Education, Inc., 218 E. 18th St., New York, NY 10003. Published yearly, it lists organizations and projects that might be of assistance to individuals interested in improving international awareness.

*Global Education Resource Guide*. Global Educational Associates, 552 Park Ave., East Orange, NJ 07017. The Development Education Program of the National Council of Returned Peace Corps Volunteers has a variety of resources available to assist Volunteers interested in talking about their Peace Corps experience. You can write them at P.O. Box 65294, Washington, D.C. 20036.

Above all, when you think of development education, don't be overwhelmed. Begin slowly, do a little at a time, and gradually the big picture will develop!

Margaret Pollack

Statistics from the U.N. Food and Agriculture Organization (FAO), reports *Otherworlds*, show that in 1985 the proportion of undernourished people in the world declined—for the first time in 40 years—from 19 to 15 percent. The actual number of hungry grew from 325 to 335 million, however, due to population growth. Areas that made the greatest gains on hunger were the Middle East and the centrally planned economies of Asia. Africa had the lowest increase in food supplies and the largest increase in the number of hungry. In its fifth World Food Survey, FAO also reports a widening gap in per capita food consumption between developed and developing countries, with people in developed countries eating an average of 3,390 calories a day and people in the 26 least developed countries eating 1,800 calories a day or less.

World Development Forum

# To the Times

Dear Peace Corps Times,

Kindly do me a favor. There was a Peace Corps Volunteer assigned to our school. He is the first Volunteer ever to be assigned to this remote school. He did a fine job in the school, in the community and even in the clan he served. He highlighted it by appealing to the U.S. Embassy accredited near our capitol to build a large elementary school in our clan. About 200 students now attend this school. This Volunteer, Fred Toomey, left us this year in February for home in the U.S. Though he promised to write when he reaches home, he also told us that he works for the U.S. government and that he was going to write as soon as he is settled. But since then we have not heard from him. He did lots of good things. We do not want the link between us to be broken. Please find Mr. Toomey for us and ask him to write to us. It was he who gave me the *Peace Corps Times* which I came across which gave me the idea of finding him through you.

He was and is still my best friend. Many other friends and some of our local leaders continue to ask me if he has written. But my usual answer is, "not yet." We shall all be happy to hear from him.

Francis Gbarwee  
Zekeh Memorial School  
% Anthony Zekeh  
NCRDP Box 3560  
Nimba, Liberia WEST AFRICA



First "Best Shot" photo winner in the "sports and leisure" category . . . a baseball team in Malem, Kosrae, Federated States of Micronesia. Photo was submitted by PCV James Textoris.

Dear Mr. Gbarwee,

We have found Fred Toomey and have forwarded your letter to him. Glad we were able to help.

The Editor

NOTE TO PCVs: When you return home be certain to write to your host country friends. They are always eager for your letters.

Dear Peace Corps Times,

I have read and heard about you before, wondering what the Peace Corps was. So after meeting a group of people from the Peace Corps here at "our" hotel in Zaghouan, Tunisia, I would like to know more. Could you please send some information? I, myself, am participating in a Danish archaeological project in the region.

Sincerely,  
Mette Korsholm  
Copenhagen, Denmark

A Note to the PCVs in Tunisia—You're making friends for Peace Corps not just in the country you serve but all over the world. The information is on its way to Copenhagen!

## Your "Best Shot" Photo Contest

The first winner of your "Best Shot" is PCV James Textoris, who works as an agriculture extension advisor and English teacher in Malem, Kosrae, Federated States of Micronesia. A graduate of George Washington University, Textoris is from Chapel Hill, North Carolina. As he gave the Times no indication of what he wanted for a prize, it will be awhile before we can announce it. (The team looks as if it could use a bat, but alas, bats are too big to go through the pouch.)

### You Too Can Be A Winner!

All Volunteers and staff are invited to participate in the "Best Shot" photo contest which we hope will be a permanent feature of the Times.

The photos should reflect your Peace Corps experience . . . your assignment, site, the people you work with, your home, your friends . . . nearly everything is included. Black and white prints are best for reproduction but the Times will accept color

slides. Be sure to write your name and address on each photo or slide so we can return them to you. Also, tell us a little about yourself . . . what you do, where you're from and anything else you'd like to see in print.

Prizes are negotiable, depending on the winners' whims. (Winners' is correct because we can use more than one photo per issue.) Favorites will probably include M & Ms, film, stationery so you can write home . . . tell us what you have in mind. Prizes are being donated by the Peace Corps Times Auxiliary.

Editor's NOTE—We've just heard again from Jim Textoris about his prize. He has requested Copenhagen snuff which he can't get enough of in the islands. This is an item which the Auxiliary hadn't thought of—but the Copenhagen is on its way to Kosrae.

# Public Affairs Ventures Forth—Into Africa

*Into Africa...is an account of Peace Corps' Director Public Affairs, Deedie Runkel's recent visit to Volunteers in West Africa. The Gambia and Senegal segments of her trip were featured in a previous issue of the TIMES.*

## Mauritania

Mauritania's reputation as a hardship post headlined all the briefings I received before arriving in Nouakchott, but nothing could have prepared me for the endlessness of the desert, and its powerful presence as a force to be reckoned with daily. Since I've returned, *National Geographic* has run a story about it that dramatizes the rigors of life there better than I ever could.

Visiting Volunteers in the field over several days required many miles of travel over the one or two primary roads in the country, as well as the desert and the beach (at low tide). Demba, the indomitable driver, seemed to have radar to reach each Volunteer, since there rarely was a mark or even a tree that indicated we should turn right and go another 25 miles or so and then turn left along a marigot. Landmarks? Not many.

Our first visit was with Miriam Kaplan in Lem Harria. After nearly a year Miriam had nearly settled in to her village from which she does agriculture extension work for eight or ten others. We were able to celebrate with her the near-completion of her shower. Apparently it had been difficult to get the mason started on the job, particularly since he was the Chief, leaving little room for leverage. Miriam finally found someone from another village who was willing to come to do the work. When the Chief discovered that she would dare to bring in someone else his work began in earnest! So a toast with some bissap (hibiscus) tea was definitely in order.

Nights on the desert are chilly, windy, and as we found the next morning, mounds of sand had been deposited at our door.

Next day we were off to a work party organized by Miriam where more than 30 men and boys came to repair the irrigation ditches in preparation for the rains. It is hard to imagine anything ever being wet in this grand sandbox.

We stopped in Rossi, a medium-size city bustling with activity, to visit with Ken McElynn, a teacher at the local high school who also volunteers at the prison in the evening. During the heat wave going on at the time, Ken reported, three prisoners had died.

Carefully timing our travel to coincide with low tide, we made our next stop at N'Diago, a village on the peninsula of Mauritania that sits out in the Atlantic Ocean. We drove right up the beach and hoped no large waves were on the way.

Mary Kay De Genova and Dave Fowle hosted us here, showing us a Partnership

Project, gardens flourishing, a clinic and other evidence of hard work. (Most of the men in this village have moved to Dakar, Senegal to fish so the population is practically all female and children.) Since most all families were observing Ramadan during my visit, I had the privilege of breaking the fast one night with the Chief's family. First came very milky coffee and bread. Then came a large bowl for those of us inside (visitors and younger men) and a smaller one for the women and children outside. While we enjoyed a special tea ceremony following dinner, the children gathered under one kerosene lamp to do their studies.

After the studies were done, and we'd gone home to bed, the children danced through the village singing, dancing, drumming...stopping at each house to collect money for those less fortunate.

Thus it was, at each stop. Bleak or barren as it was, a hardship post or not, in Mauritania joy and concern for one's fellow man simmer just beneath the surface of that mighty desert.

Donnan Runkel

*Mauritania has about 1.4 million people and a land area of 419,000 square miles. The climate—hot and dry with alternating high and low pressure of the desert. Daytime temperatures exceed 100 degrees for six months of the year. Night temperatures drop to 45. Mauritania is bordered by Senegal, Mali, Western Sahara, Algeria and the Atlantic Ocean.*



*Irrigation in Mauritania—Miriam Kaplan discusses a day's work in repairing irrigation ditches with her counterpart near Lem Harria in Mauritania. (Photo—Deedie Runkel)*



*Dave Fowle, who lives in the peninsular village of N'Diago, examines the catch of the day at the local market. Photo—Deedie Runkel*

# Life After Peace Corps

## The Peace Corps Advantage

Former Peace Corps Volunteers are consistently outperforming their fellow workers, in terms of salary gains and upward career mobility, according to a report presented to the convention of the American Psychological Association in September.

The report, the first comprehensive review of the U.S. working experience of former Peace Corps volunteers, is based on the lifetime career patterns of 437 volunteers. Almost 60% of the volunteers surveyed in the report, which sampled returned volunteers across the 26 year history of the program, chose careers in three fields; education (27.2%), health services (15.3%), and government (13.6%).

In each of the three fields the returned Volunteers reported salary gains in excess of those given to workers lacking the Peace Corps experience. During a recent five year period, former Peace Corps personnel, now employed as teachers, outperformed national salary gains for educators by 13.5%. During that same period those volunteers working in the field of health services led the national average gain by 40.1%, while volunteers now employed in government had an advantage of 10.6% in salary gains over other government workers during the five year period.

26.9% of the volunteers, who chose careers in a wide range of professions other than the three previously cited, reported salary gains averaging 68.8% over the five year period 1980 to 1985. The largest salary gains for returned volunteers during that five year period were reported by volunteers now working as bankers, where the average gain was 189.6%.

The salary and career mobility advantages enjoyed by former volunteers are particularly impressive when specific groups of Volunteers are compared to otherwise comparable groups which lack the Peace Corps experience, according to the authors of the report, Joseph O'Donoghue and Mary Ann McDevitt-O'Donoghue, faculty members in the Psychology Department of Mercy College, Dobbs Ferry, N.Y.

For example, college faculty who were recipients of Fulbright Grants, government awards which provide faculty with up to one year of overseas experience as teachers or researchers, averaged a salary increase of 29.9% over a recent five year period. In that same period the returned Peace Corps Volunteers, who are now employed as college faculty, and who did not receive Fulbright Grants, had salary advances averaging 54.4%, or total gains almost double those given to other faculty with overseas experience.

## Returned Volunteer Services Reports On International Job Opportunities

In the short five months that I have been with Peace Corps as the Career Information Specialist, I have had the luxury of speaking with hundreds of recently returned Volunteers and many staff members on the subject of employment, particularly on the subject of opportunities in international development.

There are many opportunities with organizations interested in the returned Volunteer and staff members. There are also some basic recurring themes I've come across in investigating questions posed by staff and Volunteers. By identifying and understanding these considerations the job search can be more effective and less frustrating.

### Do I need a master's degree or will experience do?

The great majority of non-profit organizations, consulting firms and private voluntary organizations in international development as well as USAID, foreign agriculture and some positions in the international trade commission prefer candidates with master's degrees. This is also true of our own agency, Peace Corps, when filling Associate Peace Corps Directors positions. The reason behind the need for the degree has to do with supply, demand and competition. Frequently, we are asked whether experience can substitute for the master's degree. The comments the recruiters in international development share with me indicate that "15 plus" years of experience in the field, with at least five of those working abroad, excellent technical skills and French and/or Spanish add a competitive edge to an individual candidacy. In the case of a great deal of experience, this candidate is more competitive than an individual with a master's degree and less than five years of experience.

### What language requirements exist?

Candidates who speak French and Spanish at a Foreign Service Institute score of three or above are always more competitive than candidates who only speak one language. Other languages become important when looking at which countries the organization is working in and for which project

For 90% of the Volunteers surveyed, who commented on the impact of Peace Corps service on their individual lives, that overseas experience was a period of profound personal transformation, shaping career and behavior choices throughout the balance of their lives. The Volunteers reported that they currently average 46.5 contacts per year in community and nationally based organizations.

ect you may be evaluated. Usually you will be interviewed in a variety of languages as part of the interviewing process if those languages are required as part of your project.

### If I don't have any of these characteristics, should I give up?

Absolutely not! If this is the career field you have decided on, you need to spend time talking with people in the field who are doing the job you'd like to do, as well as preparing yourself to learn as much as possible about the organizations working in your specialty area. Yes, people with bachelor's degrees and two years of Peace Corps experience have been hired as APCDs, consultants, and staff members BUT it is competitive and it often comes down to having the right skills, the right contacts and being in the right place at the right time. The TAICH Directory of Non-Profit Organizations Working in Development Assistance Abroad, the Overseas List and the listing of Current Technical Contracts and Grants for USAID are all resources to help you generate a target list of organizations with which to begin making contact.

### Organizations you don't want to overlook.

Seriously consider taking the Foreign Service Exam. It's given every December and Returned Volunteer Services sends the registration and information booklets to all country posts. Usually the registration deadline is in late October. By taking the exam and passing it and the following oral panel interview, a candidate becomes eligible for opportunities in Foreign Service with the State Department, USIA and the Department of Commerce.

The test is free. For those living abroad, many of the embassies are the sites where the exam is given. It is, however, a good idea to brush up on verbal skills as the comments I've heard from the Volunteers taking the most recent examination is that the current events questions and hypothetical situation questions are relatively easy, but the verbal section is reminiscent of a very rigorous GRE verbal test.

In addition, CARE and Catholic Relief Services have asked that we make staff members particularly aware of their organizations as a possible way of continuing your commitment to development issues. Patrick Shields, the International Personnel Director for CARE is a returned Volunteer himself, and he has mentioned an interest in staff members who are finishing

(continued on page 14)

# Earn, Learn and Teach in Fellows Program

Every year hundreds of veteran Peace Corps educators return to the U.S. with the qualifications and motivation needed to teach in the inner city schools, but many lack the necessary certification. In an exemplary model of cooperation with an institution of higher education, the government and the private sector, RPCVs are being recruited to teach in the public schools of New York City.

The Peace Corps Fellows Program, designed by Columbia University's Teachers College, offers returned Volunteers a teaching position with the New York City Board of Education and an opportunity to earn both a master's degree in education and teaching certification.

Throughout the nation, shortages of qualified mathematics, science, special education and English as a Second Language teachers exist. This problem is particularly acute in inner-city schools in which educators must have multi-cultural sensitivity and tolerance and must be especially creative, flexible and dedicated. These qualities are ones which are specifically nurtured by Peace Corps service. With the support of the Xerox Corporation, Hebrew Technical Institute, the Board of Education of New York City and an anonymous donor, Teachers College has been able to offer generous tuition grants to attract RPCVs to teach in fields where critical shortages exist.

Returned Volunteers are eligible to participate in two programs. 1. A math or science master's program with three-fourths tuition scholarship for both years. 2. Fellowships and scholarships in special education, nursing education and bi-lingual education which cover from 30 to 50 percent of tuition for the master's program.

Teachers College, in conjunction with New York City, will place the Fellows in teaching positions. Starting salaries will be about \$21,500, with credit given for overseas teaching experience. Fellows must complete the 32-credit master's program at the end of the two year period.

Volunteers who need to plan for their careers before returning to the States who are interested in the Fellows program for the fall of 1988, should write to:

Henry Fernandez  
Peace Corps Fellows Program  
Box 301  
Teachers College, Columbia University  
New York, NY 10027

Since the Fellows program began, only two years ago, 50 RPCVs have participated. The first 10 received their master's degrees last spring, 10 more are scheduled to graduate in December.

## Working Internationally

The following is an article from the Eastern Caribbean newsletter, *SEA BREEZES*, written by Julia Perkins who serves on St. Kitts.

If you have been considering a career in international affairs/development after Peace Corps the following information may be helpful.

There are vast career opportunities in the international field. Needless to say, competition for those opportunities is quite keen. The main challenge faced by potential career seekers is identifying and pursuing those opportunities. Only a small fraction of job vacancies are advertised by recruitment programs and classified ads. The majority of positions are filled through the "network" of friends of friends and of those individuals who happen to be well-informed. Start building your portfolio of contacts today.

One thought that should be kept in mind is that international does not necessarily mean working abroad. Thus, prior to your job search determine your preference of domestic or overseas employment and what you really would like to be doing. Your decisions will determine the job-hunting strategy to be employed.

Opportunities in international development can be found in the following areas: Federal government, United Nations, international organizations, nonprofit organizations, international businesses, consulting, research organizations, teaching and communications. Specific names and addresses are listed in many reference books at Peace Corps, USIS and larger libraries.

Ideally, personal interviews are the best method of obtaining information. However, when writing an organization to obtain information these points should be kept in mind:

- your letter is a reflection of yourself
- brevity and conciseness are important
- be very explicit that you are seeking information
- enclose a resume
- highlight specific accomplishments
- state foreign language abilities
- ask for names/addresses of others that could be of assistance.
- ask for advice.
- thank them in advance for their assistance
- remember to send a thank-you note upon receipt of a response.

An excellent guide book to start your international job search is, *INTERNATIONAL JOBS—WHERE THEY ARE AND HOW TO GET THEM* by Eric Kocher, Addison Wesley, 1979. It is at most bookstores in the States at \$5.95.

A Tree That Does It All—"It sounds like a feat of genetic engineering, tailor-made for developing countries," says South magazine of *azadirachta indica* (also known as the neem tree), found in South Asia, Africa, Southeast Asia, Florida and Central America. The tree "bristles with chemical weapons" that can be used to protect crops from a variety of insect pests, such as locusts and mites. In addition, its seeds can be crushed and made into fertilizer "cakes" that have been shown to boost crop yields by up to 1.3 tonnes per hectare. These protein-rich, high-fiber cakes are also being considered as possible supplements to animal and poultry feed. South adds that the neem tree can be used as a "medicine to purify the blood and treat rheumatism, eye, skin, kidney and bladder diseases, as a mosquito repellent, to kill soil nematodes and other plant parasites, to build houses, lubricate engines, produce soap, paper and plastics." To top it all off, Indian researchers are working on using oil from the tree as a contraceptive.

World Development Forum

(Opportunities from page 13)

their term of employment and are looking to stay in international development. You can contact Patrick with a resume at:

CARE  
660 First Avenue  
New York, NY 10016

Maria White, Director of Recruitment at Catholic Relief Services, has also mentioned an interest in returning Peace Corps staff member for openings within her organization. You may contact her at:

Catholic Relief Services  
1011 First Avenue  
New York, NY 10022

USAID also has an intern program called the IDI program. Typically SF-171 forms need to be sent to Angella Green, Director of Recruitment, for consideration by June 30th every year. By the way it is a good idea to read the USAID brochure on the IDI program which describes the qualifications and educational preferences for the intern positions before submitting your SF-171. We are told that a large percentage of every IDI class is filled with returned Volunteers and staff. You can write to Angella at:

Chief, Recruitment  
USAID  
2401 E Street NW  
Rm 1430  
Columbia Plaza, SA-1  
Washington, DC 20523

Best of luck in your job search.

Mary Jo Morgan  
Returned Volunteer Services

Peace Corps Times

From the Field

## The Tippy Tap: A Simple Handwashing Device

Unwashed hands may transmit intestinal pathogens which cause life-threatening diseases. Since several litres of water are needed to wash hands in a basin, a mother in a rural area would have to fetch water every day just to meet the handwashing needs of her family. Where water is scarce or must be carried long distances, (the completion of such a chore) is often unrealistic and sometimes impossible.

The Tippy Tap is a simple device which facilitates handwashing, using as little as 50 ml of water at a time. The Tap is inexpensive and can be placed wherever needed: near the cooking place, at the latrine, in rural food stores, and in school yards, especially near latrines.

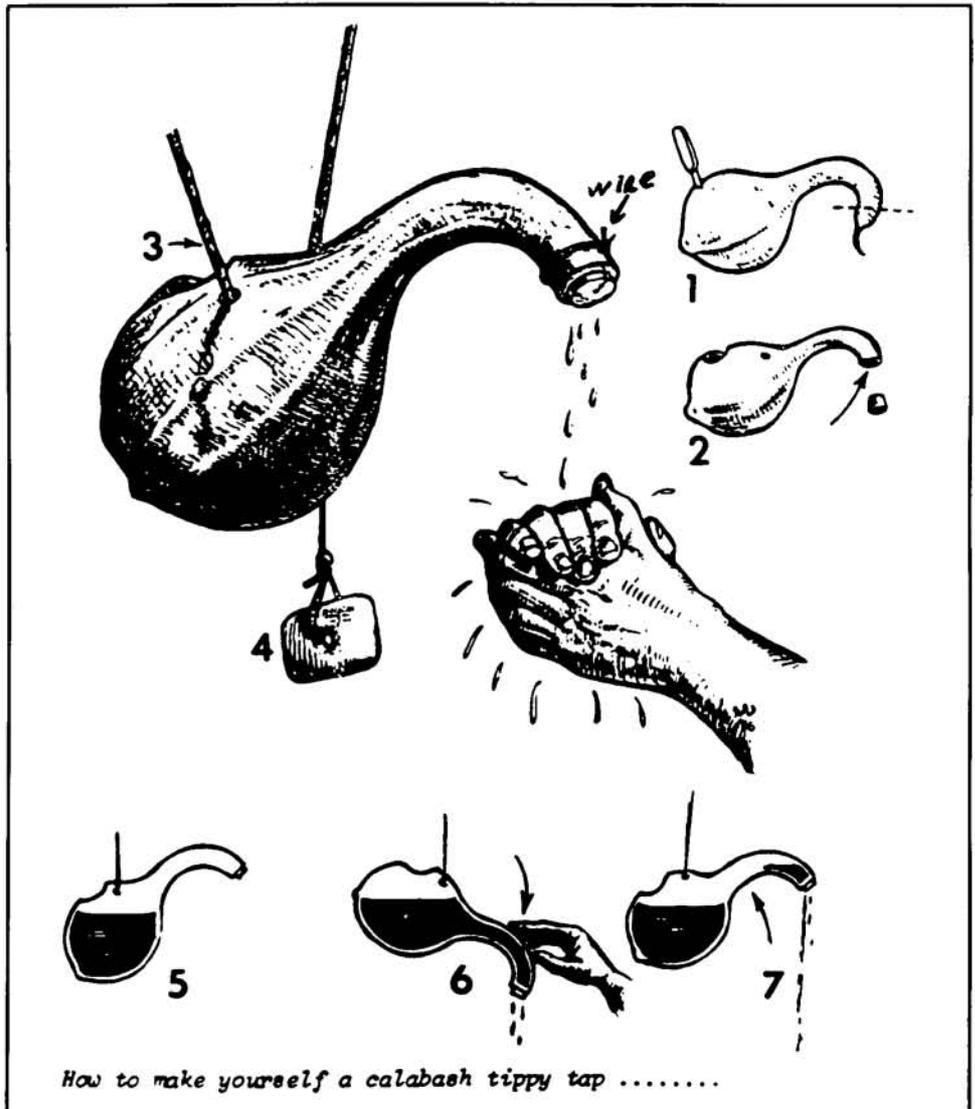
Two models are described here, in the hope that different countries will develop and test their own designs. The potential for local industry is good even at the village level, but only after testing and studying the Tippy Tap's acceptability.

This article is taken from the January/February, 1987, issue of Glimpse magazine. Though not written by Peace Corps Volunteers, the concept is sound and is designed for village-level use.

The **Calabash Tippy Tap** was designed by Dr. Jim Watt and Mr. Jackson Masawi at the University of Zimbabwe's rural centre (at Howard Hospital). The **Plastic Tippy Tap** was designed by Mr. Ralph Garnet and Dr. Jim Watt in Canada, initially to provide handwashing for campers. It has worked so well that it can be recommended for trials with whatever plastic bottles are available in different countries.

### The Calabash Tippy Tap

A large, dried gourd with a curved "handle" is chosen (1). The tip of this handle is cut off, and a hole large enough to fill it with water is cut as shown in the diagram (2). Through these two openings, the dried remains of the inner pulp are carefully scooped out. A short piece of tree branch is cut and tapered to fit very snugly into the hole at the end of the handle. This hole may need to be reamed out for a good fit. A good fit will allow a thin trickle of water past the plug when the gourd is filled and tipped. If the flow is too slow, a notch can be cut down the length of the plug. Swelling of this plug may cause the handle to crack. This can be prevented by keeping



the plug a little loose, and by wrapping a turn of wire around the end of the handle (see diagram).

Two holes are cut near the base of the handle. A thin rope, from which the gourd may be hung, is threaded through these holes (3). These holes are positioned so that the device hangs with the handle about horizontal when empty, and tipped up when full of water (5). A bar of soap (4) may be tied to one of the supporting ropes.

Tilting the Tippy Tap (6) fills the handle with water, which runs out in a thin

stream. Releasing the Tippy Tap allows it to swing upwards (7). Water trapped in the curve of the handle continues to run for several seconds, allowing the handwashing to be completed, after which the flow stops automatically.

Outdoors, the runoff water is no problem. Indoors, a basin would be needed to collect used water and to avoid spilling. The Tippy Tap is particularly useful in rural areas in view of its simple operational technique.

(continued on page 16)

## The Plastic Tippy Tap

The bottle chosen should have a capacity of 30–50 ml and a hollow handle. The base of this hollow handle is heated gently and evenly over a candle flame. The bottle should be turned constantly to warm the plastic until its "shine" shows and it is soft. Special care must be taken when heating the inside curve of the base of the handle. When the plastic is soft all around, this part is then quickly pinched with long-nosed pliers (A) and held until the plastic seals tightly and cools. Thin walls and wide handles need extra care to avoid any puncturing.

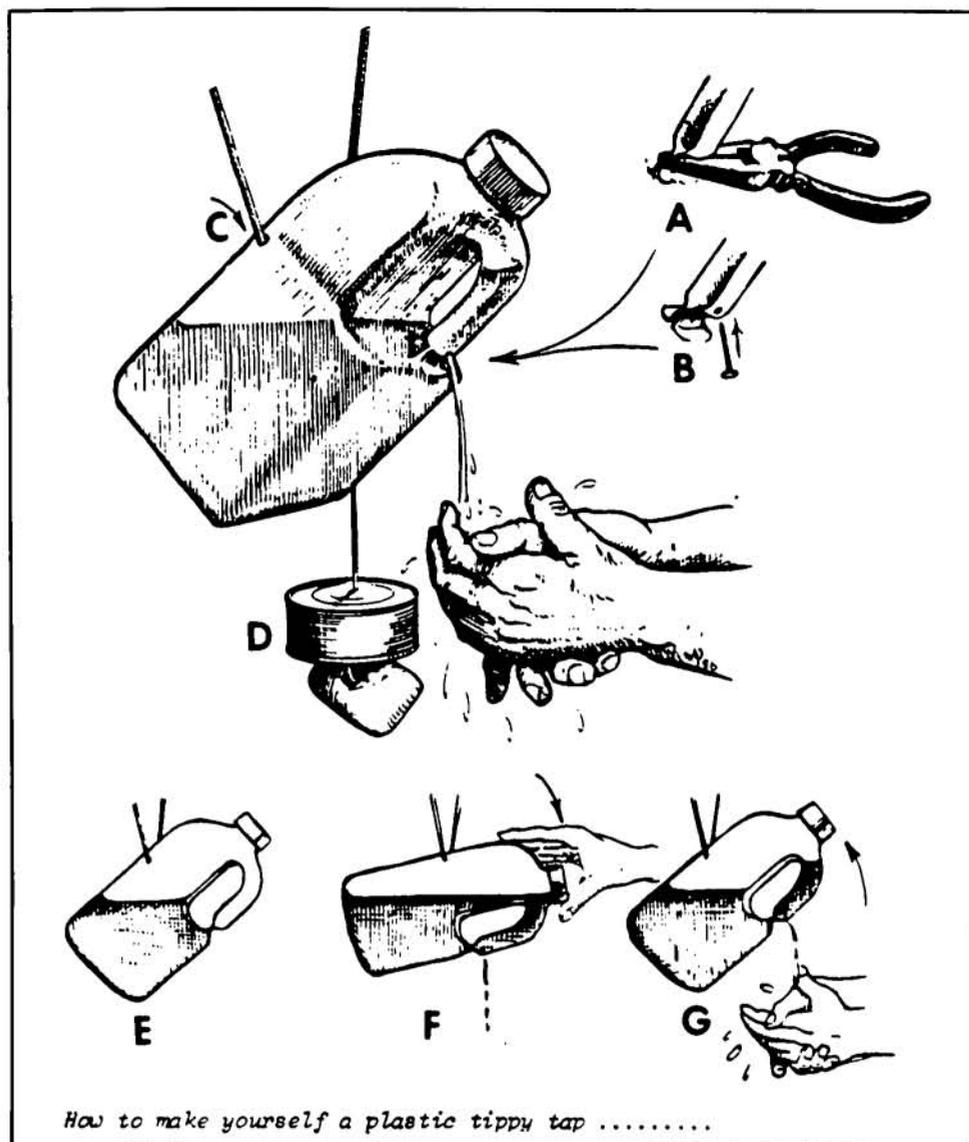
A small nail (2 mm or so in diameter) is heated in the candle flame and used to make a hole just above where the handle has been sealed, and where the handle curves outward (B). Two holes, large enough for a thin supporting rope, are burned into the opposite side of the plastic bottle (C), positioned so that the bottle tips at about 45 degrees when full (E).

The bar of soap may be tied to one of the supporting ropes (D), shown here with a can threaded on the same rope to protect the soap from the sun and rain (thanks go to Zimbabwe's rural farmers for this idea).

When suspended and filled with water, the plastic Tippy Tap works somewhat better than the Calabash. A small bottle is good for about 30 washes a fill, though the smaller handle may require two tips to provide an adequate wash. A 4-liter bottle can deliver over 100 adequate washes, running about 15 seconds each.

(If the heavier bottle causes too much wear on the supporting holes, a knotted rope sling may be used instead for suspension.)

This tap has gained considerable popularity among school children and in the rural areas in Zimbabwe. If used regularly, it can reduce transmission of deadly diseases, including cholera.



More information on this tap will be available through ICE, or may be obtained from: Dr. (Major) Jim Watt, The Salvation

Army Children's Village, 3004 17th Avenue S.W., Calgary, Alberta, CANADA, T3E 0B2.

## Integrating Food Production Efforts

Feature

During the coming decades, an increase in food production and availability will be necessary to keep up with population growth. Not only does the developing world need more food, but, as the ratio of arable land to people declines, techniques must be employed which make the most efficient use of available land. Fish ponds can be developed on marginal land. Trees can be planted to provide windbreaks. Irrigation can be provided to bring more water to agricultural plots. Intensive vegetable gardens can be designed to increase nutrition. These and other techniques can be used to increase nutritional food supplies.

Increasing yields of individual farmers or communities can also augment income. With more income, farmers may better be able to afford food which they, themselves, do not produce. More money may also help pay the expenses of education, housing, clothing, and necessary tools and equipment. The opportunity to generate on-farm income can also help reduce the rate of rural-urban migration.

Adequate rainfall, soil fertility, temperature, competition from other plants for nutrients, resistance to disease and predators all affect yields. The quantity and quality of food produced and distributed also depend

on such varied elements as price incentives, market outlets, labor availability, health status of laborers, education, and available technologies. The need for a comprehensive, cooperative, and integrative approach to food production systems appears logical.

### Peace Corps Efforts

Peace Corps projects in food production reflect the needs of the host countries. Volunteer efforts cover such diverse areas as crop extension, plant protection, livestock

## ICE Almanac

**ICE Director**  
Maureen Delaney

**Editor**  
David Thomas

**Networking**  
Trish Heady

The ICE ALMANAC features a variety of Volunteer ideas and technologies which can be adapted locally, and highlights particular program areas with notes and recommendations from programming specialists in the Office of Training and Program Support.

Information Collection and Exchange (ICE) is Peace Corps' central technical information unit. Contributions, requests for technical information or correspondence concerning the ALMANAC should be sent to: Peace Corps, ICE, Rm. M-707, 806 Connecticut Ave., NW, Washington, DC 20526.

and range management. Health and nutrition Volunteers often promote the establishment of household vegetable gardens. Volunteers in small animal husbandry train farmers to raise poultry and other small livestock more effectively, while

other PCVs conduct extension work in beekeeping. Volunteers also work in freshwater and marine fisheries as well as in agroforestry food-production projects.

Soil conservation and water resource development projects help improve the environment for agriculture. Tree planting assists in preventing soil loss and water runoff. Fuel-efficient cookstove projects help alleviate the loss of trees and shrubs, thus reducing the damage to soil and water supplies. Projects involving the preservation and storage of food also affect the quantity and quality of the food available for consumption and sale.

### Volunteer Cooperation and Integrated Food Systems

Many Peace Corps Volunteers are trained in a technical speciality, but most farmers in the developing world are not so focused. These farmers need assistance in many different aspects of a food production system—crops, livestock, storage, marketing, and more. To meet these needs, PCVs have frequently called on other Volunteers who have other needed technical expertise.

For example, a Volunteer in Kenya, working with a cooperative to raise food for profit, called on water resource development Volunteers to help the members install a pump, forestry PCVs to show the group how to set up a nursery, and a busi-

ness Volunteer to assist the people with recordkeeping.

Three Volunteers in Ecuador, assigned to different projects, decided to mesh their technical expertise into an integrated project. One PCV was working in a freshwater fish-culture project, another in a swine-raising project, and yet another in a forestry project. They realized that pig manure would be a good source of fertilizer for the ponds and that leucaena trees could be planted around the ponds to provide food (leaves) for the pigs and to stabilize the banks of the pond. Sludge from the fish pond would then be used as fertilizer for the trees. Thus, these Volunteers were able to assist their farmers in developing a self-sustaining food production system which produced larger yields because each part contributed to the growth of the other two parts. This exemplifies an integrated food production system which makes intensive use of the land and is resource efficient.

Agroforestry is by nature integrative. Trees are grown together with crops in a way which maximizes the use of the land. Depending on the species, these trees can meet a variety of needs. "They can provide the four Fs—food, forage, fertilizer, and fuel," says Jacob Fillion, Natural Resources Sector Specialist in the Office of Training and Program Support (OTAPS). Trees help prevent soil erosion, can be harvested for

*(continued on page 18)*



## The Integrated Approach

(Food from page 17)

building materials, and some species even have insecticidal properties.

Another example of integrated food production is the Sloping Agricultural Land Technologies (SALT) project in the Philippines. Steep hillsides are terraced and planted with nitrogen-fixing tree crops. The trees provide forage for ruminants, which in turn provide compost for the trees. Every five years the trees are harvested for fuelwood.

## Integrated Programming

Volunteer cooperation and the integration of more than one technical speciality into a food production system are features of a relatively new Peace Corps concept—integrated programming. The need for this type of programming has grown out of the experiences of Peace Corps and other development groups. "In the '60s, the Peace Corps tended to think that many development problems could be solved during a 2-year Volunteer assignment period," states Jim Ekstrom, who has been with the Peace Corps on and off since the 1960s and who is currently Director of the Program Support Division in OTAPS. "That usually meant focusing on a single aspect of a particular development problem," he continues. "Today, the Peace Corps and most development agencies see development as a long-term, on-going process. Today we see more clearly that the problems which prevent development are usually inter-related and cannot be solved by partial solutions."

### A Broader Approach

A few examples show why projects would work better if more of the multifaceted aspects of food production were taken into consideration during the design stage.

- A Peace Corps Volunteer in Honduras helped to construct three irrigation projects. Two of these are no longer operative. Narrowly focusing on the irrigation project itself, the Volunteer (and project designers) had failed to consider what steps would be necessary to ensure a continuing supply of water at its source. As trees in the watersheds were felled for fuel and building material, organic matter, which retains water and reduces water's erosive effect on soil due to runoff losses, was lost. According to Jaime Henriquez, Water/Sanitation Sector Specialist in OTAPS, "Irrigation projects cannot be conducted in isolation from forestry and watershed manage-

ment." The watersheds were unable to absorb and retain enough water to recharge springs.

- In Swaziland, herbicides sprayed in major crop areas killed a wild, green, leafy plant that the people gathered for food. The plant was a good source of vitamins A and C. Unfortunately, this nutritional source was not taken into consideration before using the herbicide. Had a nutritionist had some input at an earlier stage, perhaps another strategy could have been developed. "When you plan an ag project," says Peggy Meites, Nutrition Specialist, "it is very useful to have a nutritionist give you the perspective from the household level. Unless you have insight from another technical specialty, you may be overlooking something."
- World Neighbors, in Nigeria, wanted to introduce soybean production to improve the protein content of the local diet. Unfortunately, soybeans were not a culturally accepted food. However, nutritionists discovered that soybeans could be substituted for a difficult-to-obtain ingredient used in a traditional sauce. Thus, the local people became interested in soybean production.

Looking at the broader picture should indeed assist in a more comprehensive, integrative food production system.

### AFSI (African Food Systems Initiative)

Despite over 25 years of economic aid, agricultural production has not kept pace with population growth in Africa. Widespread famine in the 1970s and 1980s pointed to the need for a much more comprehensive approach to food security. Such an approach would look at food availability as a system, with preproduction, production, and postproduction phases. The Peace Corps response was the launching, in 1985, of the African Food Systems Initiative (AFSI), a program which will eventually operate in 12 countries over a 10-year period.

Before establishing an AFSI program in a given country, Peace Corps sends a team of experts in various disciplines to conduct an assessment and to design a program for a 5- to 10-year period. As the team members consider food production possibilities, they look at soil fertility and water availability as well as postproduction issues such as storage and marketing. Volunteers trained in different areas of technical competence are sent in teams to a particular area of the country. As the needs of the area change, a team's composition may be altered to meet the new circumstances. Programming, then, is dynamic rather than static.

Lesotho, one of the first countries to receive AFSI Volunteers, provides an example of how the Initiative works. PCVs trained in various skills work in teams, and each team is assigned to a different watershed. At present, AFSI Volunteers in Lesotho are concentrating on soil conservation, small-scale irrigation, and nutritional gardening. Once the soil has improved and water is more readily available, market gardens and orchards will be introduced along with the transfer of marketing skills.

### Programa de Accion Integrada (PAI)

Another example of integrated programming is taking place in Paraguay. In 1987, Peace Corps/Paraguay initiated a rural development program called the Integrated Action Program (Programa de Accion Integrada—PAI). PAI seeks to provide a coordinated approach, integrating activities in the program areas of nutrition, sanitation, education, and agriculture. Volunteers in the program are deliberately situated to allow for the sharing of project ideas and developments. Eventually, approximately 80 percent of the PCVs in Paraguay will be part of the PAI, which is focusing on 4 of the 18 Departments, or geo-political units of the country.

### Integrated Training

To support Volunteer cooperation and integrated programming, efforts are now being made to design training programs which increase Volunteer awareness of integrated food systems and of what other PCVs with different specialities can contribute.

- Pre-service training in May and June, 1986, for water resource development Volunteers going to Mali, also provided overviews of the basic principles of forestry, soil conservation, and gardening. Volunteers received this broader training to enable them to work more effectively as a team with PCVs trained in the other specialties.
- A new agroforestry in-service training program in Ecuador will include Volunteers in crop and livestock development as well as in forestry. This will help Volunteers develop integrated food systems combining all three types of agriculture.
- A pre-service training program for biology generalists going to Ecuador is being planned which would include not only specific skill training, but also instruction about the linkages between different aspects of agriculture.

(continued on page 24)

# Networking

## Council for Exceptional Children

Over 40 percent of the population in developing countries is under the age of 15 and many of these children may be considered "exceptional"—that is physically, mentally, or emotionally different from the average child. Oftentimes in developing countries children with these differences are completely shut out of society and are not able to lead fulfilling lives. Peace Corps Volunteers are in a unique position to help mainstream these children, both in the classroom and in daily life. All PCVs, not just the 4 per cent involved in Special Education, have the opportunity to work with and influence the life of an exceptional child. Ideas and support are available from the largest professional organization involved in special education, the Council of Exceptional Children (CEC).

CEC has been involved in improving the lives of exceptional children for over 65 years. A professional organization with over 50,000 members working in 14 divisions, CEC engages in such activities as publishing, professional development, conferences, information services, and ad-



vocacy. ICE distributes CEC's quarterly journal-magazine for practitioners, *Teaching Exceptional Children*. This is a skills-oriented publication which includes book reviews, news of coming events, a teacher idea exchange, and other information useful to the professional in special education. Other CEC publications are the research journal, *Exceptional Children* and the quarterly journal of abstracts, *Exceptional Child Education Resources*. CEC also makes available a wide variety of professional teaching aids such as filmstrips, cassettes, and reports. CEC operates the federally funded Educational Resources Information Clearinghouse (ERIC) on handicapped and gifted children. CEC offers computer searches of this and its own data base, which together comprise the largest collection of special education information in the world.

Volunteers interested in joining CEC or finding out more information about its services may write to:

The Council for Exceptional Children  
1920 Association Drive  
Reston, Virginia 22091-9990  
U.S.A.

## Information Sharing Centers

### PC/Ecuador and USAID

Both the Peace Corps and the United States Agency for International Development (USAID) have a long history of working hand-in-hand with the people of Ecuador. Peace Corps Volunteers (PCVs) have joined their efforts to those of USAID officers and contractors involved in the bettering of living conditions for thousands upon thousands of Ecuadorean citizens. Whether working on a reforestation project, building a potable water supply system, or assisting rural women in the preparation of flour from dried yucca, PCVs frequently have found that their project goals fit closely with those of USAID.

In Ecuador there is also a close sharing of development information of all types between the Peace Corps and USAID. One of the outgrowths of collaboration in resource sharing is the way in which the information centers of the two organizations work together. Since December 1985, PC/Ecuador has operated an In-country Resource Center (IRC), providing informational support to Volunteers.

For many years USAID has operated a Technical Information Center (TIC) in Quito. Within the past year the TIC has opened its doors to PCVs and host country nationals as well as to its traditional clientele, USAID staff members and contractors. The TIC has a great deal of information specific to USAID/Ecuador projects as well as general materials on topics such as agriculture, health, appropriate technology, resources and the environment, and women in development. Many of the books or videocassettes are in Spanish, which makes the material more readily usable by the Volunteer in the field.

Using a computer to catalog materials has enabled the TIC to provide ready access to data in the library, either through keyword, subject, or title searches. In the near future it is planned that the PC IRC will use the same computer-based cataloging system, making information readily interchangeable between the two centers.

Both the IRC and the TIC maintain long lists of in-country sources of information, and work closely with institutes and information centers in Ecuadorean ministries. The IRC and the TIC plan to expand even further their contacts with other resource centers within Ecuador.

The Technical Information Center is also joined to the USAID Center for Development Information and Evaluation (CDIE) in Washington, D.C., through a telecommunications link. Professional researchers in Washington, who have access to approximately 360 databases as well as the USAID information network, respond to queries sent to them on behalf of library users who find that information available in Ecuador is not sufficient to meet their needs. The USAID development assistance memory consists of project designs, evaluation and implementation documentation, feasibility and research studies, conference papers, and technical reports generated from USAID projects, programs, and contracts. CDIE also maintains cooperative working agreements with the United States Department of Agriculture, the Bureau of Census, the National Technical Information Service, the National Library of Medicine, the Library of Congress, the World Bank, the International Monetary Fund, and many development institutions.

PCVs in Ecuador have requested a wide variety of information from CDIE through the TIC. Some examples of recent requests are: Spanish materials teaching basic busi-

(continued on page 20)

(Ecuador from page 19)

ness practices to the Salasaca Indians, ways of educating cerebral palsy victims, information on the legal rights of women, evaluations of the feasibility of handicraft projects, materials on sand filtration processes designed to rid water of impurities, basic material on organic gardening in Spanish, as well as literature searches on a wide variety of topics.

PCVs in Ecuador thus have several possibilities of obtaining relevant information quickly in country. The Volunteer can use the services of the PC IRC as well as the TIC

at USAID, augmented by CDIE research assistance in USAID Washington. As Volunteers quickly discover, the surfeit of information on almost any topic, which is a fact of life in the United States, becomes an almost total lack of relevant data in those countries where information services are most needed. The IRC and the USAID TIC hope by working together in information sharing to make the PCV's use of time in country more productive. Insights into why development projects succeeded or failed in the past can avoid wasted time and energy for the Volunteer now. Informa-

tion can be tailored to a PCV's needs, and usually includes current technology at a level appropriate to their needs. The IRC can provide the TIC with ICE-published materials, as well as feedback concerning work in the field currently being undertaken by Volunteers in country, so that all those involved in development assistance are aware of the status of projects being undertaken. In an era when resources continue to remain scarce, cooperation between those working for the same goals is essential.

## French and Spanish ICE Manuals

### TRANSLATIONS

Spanish and French translations of 10 ICE Manuals, Reprints, and Packets are now available free through ICE. As with all ICE-published materials, these translations may be ordered for counterparts as well as for Volunteers and staff. We urge you to take advantage of this opportunity.

Publications were translated due to numerous requests for foreign language materials. We chose to translate those manuals which were ICE's "big sellers". Now we are in a quandry. Though many of these materials have been advertised in the "ICE Almanac", and are listed in our new "red" *Whole ICE Catalog*, we have gotten few requests from the field.

If ICE does not receive enough requests, we will not be able to justify translating more of our materials. Translations are a costly venture (this last exercise cost well over \$100 thousand). Therefore, we encourage you to use these translations in your field work.

Please look over the following list to see if any of these translations would be of use to you or your counterparts. Then write to us.

**M11 Practical Poultry Raising.** Contains basic instruction on poultry raising, management, and marketing. Also includes information for experienced poultry workers on cultural considerations and additional resources. Stresses appropriate improvements to traditional practices to increase production of eggs or meat.

**M34 Crianza Practica de Aves.** Spanish of M11.

**M30 Elevage Practique de la Volaille.** French of M11.

**M13 Traditional Field Crops.** Suggests improvement methods to increase small farmer yields of six crops traditionally grown by farmers in developing countries—maize, millet, sorghum, peanuts, beans, and cowpeas. Emphasis is on simple methods to improve traditional growing practices among small farmers, with specific up-to-date information on reference crop culture requirements, diseases, and pests. Extension techniques and the work of international research organizations for the reference crops are also discussed.

**M35 Cultivos Tradicionales.** Spanish of M13.

**M38 Cultures Traditionelles de Plein Champ.** French of M13.

**M17 Small-Scale Beekeeping.** An overview of beekeeping and its possibilities as a tool for development. Includes basics of beekeeping, project planning, management schemes, disease control, and a hard-to-find guide to intermediate technology beekeeping systems and methods. Also includes plans for building simple beekeeping equipment.

**M25 La Apicultura de Pequena Escala.** Spanish of M17.

**M26 Apiculture de Petite Echelle.** French of M17.

**M21 Peace Corps Literacy Handbook.** An introduction to literacy teaching

for Volunteers and other development workers. Provides clear and simple guidelines for the preparation of a literacy program, and the development of appropriate methods and materials, as well as strategies for evaluating and improving programs. Presents several short case studies as examples of various types of literacy projects. Stresses the importance of involving counterparts and the local community to encourage the continuation of the program. Includes a special section on resources for literacy teaching, from the local to the international level. Includes the addresses of various relevant organizations, and an annotated bibliography of literacy instruction materials.

**M28 Manual de Alfabeticacion del Cuerpo de Paz.** Spanish of M21.

**M32 Manual D'Alphabetisation Du Peace Corps.** French of M21.

**M1B Freshwater Fish Pond Culture and Management.** A guide to planning, construction, and maintaining small-scale fish pond operations, with information on fish diseases, selecting warmwater fish, and fish preservation. Produced as a joint project with VITA.

**M1D Cultivo y Manejo de Estanques Pesqueros de Agua Fresca.** Spanish of M1B.

**M37 Culture et Gestion d'Etangs a Poissons d'Eau Douce.** French of M1B.

- M14 **Guidelines for Management Consulting Programs for Small-Scale Enterprise.** Offers programmatic and technical guidelines designed to assist program planners and management consultants working with small-scale entrepreneurs in developing countries. Primary focus is management assistance to small, owner-operated industrial firms. Includes discussion of applied techniques, how to organize and teach a seminar to SSE personnel, and advice for consulting on specific SSE-related problems. Appendices provide seminar audiovisual materials, classroom handouts and case studies, as well as forms useful in planning and executing a consultancy. Also included are an extensive annotated bibliography and directories of sources of additional information for the SSE consultant.
- M27 **Pautas para Programas de Asesoramiento Gestional para Microempresas.** Spanish of M14.
- M29 **Directives Relatives a L'Elaboration de Programmes de Conseil en Gestion pour Petites Entreprises.** French of M14.
- R25 **Intensive Vegetable Gardening for Profit and Self-Sufficiency.** Provides step-by-step guidelines for cultivating vegetables under many agricultural and climatic conditions, organically or with chemical fertilizers.
- R59 **Horticultura Intensiva de Vegetables para Ganacia y Autosuficiencia.** Spanish of R25.
- R60 **Culture Maraichere Intensive Destinee a la Vente et a la Consommation Domestique.** French of R25.
- R50 **Science Teacher's Handbook.** Written by Peace Corps Volunteers serving as science teachers/teacher trainers in India. Suggests activities and designs to help science teachers to improvise or build pieces of laboratory apparatus and make instruction effective and interesting. Includes chapters on investigation, demonstration, science clubs, and laboratory techniques.
- R66 **Manual Para el Profesor de Ciencias.** Spanish of R50.
- R64 **Manuel du Professeur de Science.** French of R50.
- M18 **Agricultural Extension.** A how-to manual covering techniques of extension work and community organization. Discusses promotion of recommended agricultural practices, training of counterparts, and a host of other related topics. Useful for extension workers in forestry, fisheries, health, or other sector areas as well.
- M39 **Extension Agricola.** Spanish of M18.
- M40 **Vulgarisation Agricole.** French of M18.
- P5 **Cooperatives.** Series of booklets covering cooperative principles, financial management, coop education, and organizations providing assistance in cooperatives.
- P15 **Cooperativas.** Spanish of P5.

## Sector Updates

### AGRICULTURE

**Tomato Diseases and Their Control,** U.S.D.A. 1972 (ICE Reprint, 1984) 109pp. Free.

Handbook on diseases that threaten tomato crops, how to identify them, and the various methods of disease control. Includes both parasitic diseases, such as viruses, insects, and bacteria, and nonparasitic diseases. Generally U.S. specific, but information is transferable to other climates and soils. Contains charts and photographs.

**Available free through ICE to all PCVs and staff working in related projects.**

**Guidelines for Agricultural Training Curricula in Africa.** 1982 (FAO, Via delle Terme di Caracalla 00100 Rome, Italy) 205pp. \$12.00.

Presents guidelines for introducing nutrition into agricultural curriculum. Discusses two options: separate nutrition course vs integrated ag-nutrition. Defines key terms; outlines course contents and ob-

jectives covering food production, processing, nutrition, agriculture and agricultural economics. Thorough guidelines include background notes and hints for teachers. Includes photographs, graphs, tables, appendices, and bibliography.

**Available free through ICE to PC offices/resource centers in country only; two copies per country.**

**Oxen Traction and Other Technologies Appropriate for Small Farmers,** by Murray A. Brown. 1985 (Sam Houston State University, PO Box 2088, Huntsville, TX 77341) 81 pp. \$10.00.

Covers general history of animal traction and its use in the world today. Discusses selling the concept of animal traction to local farmers. Includes sections on selecting animals, training, feeding, and maintaining their health. Gives suggestions and available resources for introducing related appropriate technologies: water systems, improved construction methods, and simple crop rotation. A step-by-step "how-to" handbook, written by a PCV trainer. Sub-

stantial bibliography. Well illustrated with photographs.

**Available free through ICE to all PCVs and staff working in related projects; PCVs please request through your APCD/program manager.**

### EDUCATION

**Peace Corps/Morocco TEFL Handbook,** by Peter Kresge. Peace Corps/Morocco. 1982 (ICE Reprint, 1985) 194pp. Free.

A guide to TEFL instruction in Morocco written by an APCD in Education. Discusses various stages of the teaching process including lesson planning, pronunciation, vocabulary, reading, creative teaching and games, and grading and testing. Several chapters are country specific, focusing on the educational system particular to Morocco. Many chapters, though, offer general guidelines on TEFL teaching and are useful to TEFL Volunteers worldwide.

**Available free through ICE to all PCVs and staff working in related projects.**

**UPDATE ON  
ICE PERIODICAL DISTRIBUTION**

Ceased Publication:

**Development International.** (quarterly).  
Development International, Inc.

**Salubritas.** (bimonthly). American Public Health Association.

New Additions to Distribution List:

**IAAD News.** (irregular). International Agency for Apiculture Development.

**ILEIA Newsletter.** (quarterly). Information centre for Low External Input Agriculture.

**Teaching Science as a Second Culture**, by Francis Dart. 1983 (Progresiv Publishr, 401 E. 32, #1002, Chicago, IL 60616) 60pp. \$4.00.

A collection of articles that centers on ways to effectively teach science to people of other cultures. Stresses that science should be used as one culture among several but not used in all circumstances. The article discusses several points, including: the impact of science; what science is; traditional cultures—the contrast; basic problems in science teaching; and teaching science—an international approach. Also gives suggestions for reshaping science education in order to bridge the traditionalist/modernist gap.

**Available free through ICE to all PCVs and staff working in related projects.**

technology for artisanal inland fisheries, strategies for future development.

**Available free through ICE in limited supply to PC offices/resource centers in country only; two copies per country.**

**Business Management in Fisheries and Aquaculture**, by Ian Chaston. 1984 (Fishing News Books, LTD., 1 Long Garden Walk, Farnham, Surrey, England) 128pp. \$12.00.

Presents methods of strategic management in order to create a more effective plan. Provides material on the functional skills of finance marketing, production and personnel management. Includes various charts and tables.

**Available free through ICE to PC offices/resource centers in country only; two copies per country.**

## FISHERIES

**Mathematics Handbook for Anglophone West Africa**, by Ed Sypher. 1987 (Peace Corps/Information Collection and Exchange) 86pp. Free.

Includes an overview of mathematics teaching in Anglophone West Africa. Covers course structure and content in Ghana, Sierra Leone, The Gambia, and Liberia. Describes official final examinations and addresses specific content areas in mathematics. Glossary of mathematical expressions.

**Available free through ICE to all PCVs and staff working in related projects.**

**Introduction to Biology**, by D.G. Mackean. 1971 (John Murray (Publishers) Ltd., 50 Albermarle Street, London W1X 4BD) 224pp. \$6.50.

A reference guide to biology, emphasizing both plant and animal processes. Beginning chapters center on plants—the types, structure and reproduction process. Middle chapters contain information on small organisms—their structure and particular processes such as breathing, excretion and sexual reproduction. Final chapters focus on insects, fish, frogs and birds. Most chapters include an outline of several experiments which are applicable to the material being presented. Contains many helpful diagrams, sketches, charts and pictures. Questions at the end of each chapter test the reader's knowledge. Useful as a beginning guide to biology.

**Available free through ICE to all PCVs and staff working in related projects.**

**Status of African Reservoir Fisheries**, CIFA Technical Paper #10, 1984 (FAO, Via delle Terme di Caracalla, 00100 Rome, Italy) 326 pp. \$23.75.

Provides an overview of problems and potentialities, particularly in terms of the information necessary for planning, fishery management and the development of new reservoir fisheries. Examines in detail the data pertaining to case studies of fisheries in Mozambique, Nigeria, Zimbabwe, Madagascar, Egypt, Sudan and Ghana. Introduces recent developments in the methodology for the assessment of reservoir fish stocks. Extensive technical data and analyses.

**Available free through ICE to PC offices/resource centers in country only; two copies per country.**

**Symposium on River and Floodplain Fisheries in Africa**, Bujumbura, Burundi, 21 November—23 November, 1977, edited by Robin L. Welcome, FAO (FAO, Via delle Terme di Caracalla, 00100 Rome, Italy) 378 pp. \$28.00.

Review and experience papers from the Symposium in the original language in which each was presented. Goal of symposium was the collection and discussion of information about inland fisheries to establish the research and management needs of these projects. Topics of discussion included assessment and evaluation of lake fish stocks, problems of Sahelian rivers and lakes, ecological and dynamic considerations of river fish stocks, fishery

## Small Project Assistance Program (S.P.A.)

The S.P.A. Program is a unique program which joins the human resource capabilities of the Peace Corps and the financial resources of the Agency for International Development. The program, established in 1983, currently supports small self-help efforts through direct grants to community organizations in 35 countries.

There are two components to the S.P.A. program: the S.P.A. fund which directly supports community projects; and the Technical Assistance (T.A.) Agreement which provides training and technical advice to PCVs, staff and Host Country Nationals who are working on field projects.

S.P.A. grants are made by PC/Country Offices to community groups working with PCVs in the areas of food production, small enterprise development, renewable energies and health.

Funds are available through PC/Washington to provide in-service training for PCVs and HCNs, and to provide program consultants for countries. The T.A. activities stimulate and/or directly support S.P.A. projects.

If you have an idea for a project in your community in one of the above areas, more information is available from PC country offices or by writing the S.P.A. Coordinator, OTAPS, PC/Washington.

## BEEKEEPERS' ALERT

Peace Corps/Central African Republic has produced an excellent beekeeping manual in French, entitled, *Manuel D'Apiculture*. Any beekeepers wanting a copy may write directly to PC/CAR.

**Opportunities in Marine Science and Technology for Developing Countries**, by Irene Martinez. 1985 (BOSTID, National Research Council, 2101 Constitution Avenue, NW, Washington, DC 20418) 131pp. \$6.00.

Discusses the means by which developing countries can efficiently manage and exploit their natural marine resources. Covers areas such as exploitation of living resources; extraction of fossil fuels and other minerals; resources for tourism; ocean energy sources; and facilities to support ocean commerce. Provides photographs, tables and charts. Good reference for project ideas.

**Available free through ICE to PC offices/resource centers in country only; two copies per country.**

## HEALTH

**Investing in Children**, Worldwatch Paper #64, by William U. Chandler. 1985 (Worldwatch Institute, 1776 Massachusetts Ave., NW, Washington, DC 20036) 66 pp. \$2.00.

An inquiry into the causes of infant and child mortality. Develops into a simple and clear analysis of the cycle of famine, drought, disease and degradation of natural systems that affects many Third World countries today. Outlines the factors directly involved in perpetuating this cycle and stresses the need for integrated development strategies with which to break it. Describes the benefits of implementing simultaneous programs in education, disease control, water and sanitation, and family planning, in addition to projects in conservation and agricultural production and reform.

**Available free through ICE to all PCVs and staff working in related projects.**

## NATURAL RESOURCES/FORESTRY

**Tropical Moist Forests: The Resource, the People, the Threat**, by Catherine Canfield.

1982 (Earthscan, 10 Percy Street, London W1P ODR, England) 67pp. \$7.00

Contains facts and statistics about the status of tropical moist forests. Focuses on the deforestation of these areas for a multitude of reasons including fuelwood and agricultural pursuits and the effect that this has on the soil, the plants and animals and the people of the area. Concludes with proposals for future action.

**Available free through ICE to PC offices/resource centers in country only; two copies per country.**

**Fuelwood: The Energy Crisis That Won't Go Away**, by Erik Eckholm, et. al. 1984 (Earthscan, 10 Percy Street, London W1P ODR, England) 107pp. \$5.50.

Overview of the fuelwood crisis in developing countries. Offers a new assessment of the fuelwood problems and possible responses. Examines how fuelwood scarcity is interconnected with agricultural and other pressing land-use dilemmas of underdevelopment. Contains recommendations for improving community forestry projects and cooking stove techniques. Concludes with possible strategies for the future.

**Available free through ICE to all PCVs and staff working in related projects.**

**What's Wildlife Worth?** by Robert Christine Prescott-Allen. 1982 (Earthscan, 10 Percy Street, London W1P ODA, England) 92pp. \$5.50.

Subtitled: *Economic Contributions of Wild Plants and Animals to Developing Countries*. Discussion of the high economic value of wild animals and plants in the Third World. Describes the utility of these plants and animals—for food and fodder, and for generating income. Stresses the need for greater efforts in determining the value of wildlife. Discusses how species and habitat conservation must go hand-in-hand with development.

**Available free through ICE to all PCVs and staff working in related projects.**

**Watershed Development**. 1979 (Food and Agriculture Organization, via delle Terme di Caracalla, 00100 Rome, Italy) 257pp. \$19.00.

Guidebook to watershed development. Discusses the planning, designing, and implementing stages. Addresses watershed development in the broader context of overall

development, with an emphasis on soil and water conservation. Describes the basic concepts and methodology governing watershed development, along with important mechanical and biological factors. Includes guidelines for preparing development plans.

**Available free through ICE to PC offices/resource centers in country only.**

**Technologies to Sustain Tropical Forest Resources**, by the Office of Technology Assessment, Congressional Board of the 98th. Congress. 1984 (U.S. Government Printing Office, Washington, DC 20402) 344pp. Free.

An informational text on the world's tropical forests. Describes tropical forest changes, including who is affected and the underlying causes of change. Discusses various technologies for the development of tropical forest lands and the application of these technologies. Gives issues and options to promote world development and use of technologies in order to sustain the tropical forests.

**Available free through ICE to PC offices/resource centers in country only.**

**Conservation and Wildlife Management in Africa**. Edited by R.H.B. Bell and E. McShane-Caluzi. 1984 (Peace Corps/Information Collection and Exchange) 646pp. Free.

(continued on page 24)

Publications listed as "available through ICE" are free to PCVs and staff according to the distribution policy indicated for each title. For the benefit of our non-Peace Corps readers, complete ordering information has been provided for all titles.

PCVs and staff may order ICE publications by letter or cable from: Peace Corps Information Collection and Exchange, Rm M-701, 806 Connecticut Avenue N.W., Washington, D.C. 20526 USA.

Please note: additional copies of limited-distribution titles and materials which are listed as "not currently available from ICE" must be purchased directly from the publisher using in-country funds. PCVs should contact their incountry staff regarding assistance in making these work-related purchases.

(Food from page 18)

### Advantages

The advantages of an integrated approach to food production could be summed up as follows:

- An integrated food production system is resource efficient, seeks to minimize reliance on outside inputs, and should, therefore, be self-sustaining.
- Encouraging Volunteers to cooperate and integrate their differing technical skills helps ensure that more of a community's needs are met.
- Because integrated programming is dynamic, rather than static, it can more easily respond to changing needs in the community.
- Taking a broad approach to project design and implementation makes a project more likely to succeed over the long run.
- Approaching a development objective from more than one perspective helps avoid unforeseen problems.

### Prospects For the Future

Integrated programming is but one kind and may not be feasible for all countries. In many situations, however, the advantages of integrated programming make the extra time and effort worthwhile. Even in the absence of integrated programming, training programs which sensitize Volunteers and staff to the multifaceted nature of food production are desirable.

With increased sensitivity and a broader awareness of integrated food systems, Volunteers are more likely to seek advice and assistance from others while attempting to meet the needs of the farmers with whom they are working. A comprehensive approach, whether informal or institutionalized in a program, should lead to higher, sustainable yields and a better quality of life for the groups that Peace Corps Volunteers serve.



(Sector Update from page 23)

Details of a wildlife management workshop held in Malawi discussing forest conservation, park planning and management, wildlife management, and environmental education issues in relation to the decline of tropical forests. The proceedings of the inservice training stressed improved planning and management principles. A good model for workshop design and training methodology.

Available free through ICE to all PCVs and staff working in related projects.

## SED

**Management Workbooks for Self-Employed People**, (5 Vols.), by Gerard R. Dodd, Friends of the Maine Idea, 1984 (Dodd-Blair and Associates, P.O. Box 644, Rangeley, ME 04970) \$18.00 per set.

Collection of monographs that discuss various aspects of the management of a micro-business. Provides important, basic guidelines in a step-by-step workbook format that permits the small businessman to introduce his own data for sample calculations, worksheets, etc. Topics covered in each volume include: Volume 1—*The Business Review, Determining Where You Stand and Where You are Going*; Volume 2—*The Business Plan, Effective Presentation of Business Ideas*; Volume 3—*Managing Time and Personnel, Using Your Time and Resources Efficiently*; Volume 4—*Basic Finances, Fundamental of Effective Recordkeeping and Planning*; Volume 5—*Basic Marketing, Basic Techniques for Reaching Your Market*.

Available free through ICE to all PCVs and staff working in related projects.

**Guia Para La Consultorio de la Pequena Empresa en los Paises en Vias de Desarrollo**, by the Foundation for International Training for Third World Countries. 1982 (Foundation for International Training, 1262 Don Mills Road, Don Mills, Ontario M3B 2W7, Canada) 282pp. \$22.50.

A small enterprise development guide written in Spanish. Designed for businessmen on how to operate a business profitably, and to keep costs at a minimum. Presents a necessary model on how to plan, organize and carry out business ventures effectively. A useful tool for those providing technical assistance to counterparts in small business enterprise worldwide.

Available free through ICE to PC offices/resource centers in country only.

**Manual de la Pequena Empresa**, by Foundation for International Training. 1982 (Foundation for International Training, 1262 Don Mills Road, Don Mills, Ontario M3B 2W7, Canada) 418pp. \$22.50.

Written in Spanish, a manual created for small-scale business enterprise persons with little administrative or technical experience. Information on the principle aspects of beginning a small business. A good resource/training manual for those consultants/executives at a basic, small-business level. Contains a well-written instructor's guide and useful student materials and case studies.

Available free through ICE to PC offices/resource centers in country only.

## WOMEN IN DEVELOPMENT

**Women in Development: A Resource Guide for Organization and Action**, by ISIS International Women's Information and Communication Service. 1984 (New Society Publishers, 4722 Baltimore Avenue, Philadelphia, PA 19143) 225pp. \$14.95.

Offers a systematic and scholarly exploration of the relationship between women and multinationals, rural development, health, education, and migration. Emphasizes the recognition and participation of women in the developing world. Focuses on the planning process for economic justice for women.

Available free through ICE to all PCVs and staff.

**Credit and Women's Economic Development**, edited by Barbara Morrison Reno. 1981 (Overseas Education Fund, 2101 L. Street, NW Suite 916, Washington, DC 20037) 44pp. Free.

A report discussing income-generating projects that involve credit and women. Provides information and a number of observations that reinforce many untested assumptions about women's access to credit. Useful information and contacts for PCVs and staff in small enterprise development as well.

Available free through ICE to all PCVs and staff.

### GIVE!

The ICE staff works hard to provide you with the most relevant, up-to-date technical information for your projects. Not surprisingly, the most useful materials we distribute are those which have been developed over the years by Volunteers like you working in agriculture, education, forestry and a host of other areas.

We depend on contributions from PCVs and staff in the field to build our collection of appropriate technical materials. Volunteers contributions are frequently published as how-to manuals. They often appear as articles in the ICE Almanac. And they make up the bulk of the reports, designs, lesson plans and other documents in the ICE Resource Center.

We are vitally interested in the results of your work. Take time to write up your fisheries project or your design for a better appropriate technology mousetrap and send it to ICE. Your fellow PCVs around the world will thank you for it!