PEACE TIMES CORPS

Asantehene of Ghana
Visits

Peace Corps/Washington



Peace Corps Director Loret Miller Ruppe with the Asantehene Otumfuo Opoku Ware II of Ghana and his wife, Madame Victoria (seated right) and members of his entourage.



Recently returned from Ghana, PCV Bruce Doneff tells of his experiences and the hopes for his host country.

November/December 1984

From the Director.

When the end of the year rolls around, most of us find ourselves in a reflective mood. We remember the good things that have happened and the other things which were not so good and wonder how they could have been made better. We resolve, if not formally, at least to ourselves, to try to make the new year a better one. We make a new commitment.

In thinking about commitments, I would like to share with you excerpts from a speech by a new Volunteer, Kevin Clarke. He was the spokesman for his group at a swearing in ceremony in Lesotho.

"There comes a moment in each person's life when a commitment, whether large or small, must be made. A commitment that may last but an instant, or a commitment that may last many years. But the commitment that we make today goes beyond the confines of time.

"As our very title implies, we are Peace Corps Volunteers. Therefore, the commitment we make today is not only a commitment to a particular department or ministry, it is also, and more importantly, a commitment to peace and the promotion of world friendship. It is a commitment we must revere. It is a commitment we must never compromise. We cannot, and we must not, forsake this commitment at the end of our Peace Corps duty. It must endure forever. It must burn in the hearts of each of us for the rest of our lives.

'There comes a moment in each person's life when he envisions the world and says, 'It can be better.' We have seen that vision and it has brought us to this moment. Though we are many in number, we are one in spirit. Though we differ in age, we are one in our ideals. Though we differ in background, we are one in our

"Now is our moment to serve a justifiable purpose on this earth. Now is our moment to promote world peace and friendship by gaining a better understanding of the people of Lesotho. Now is our moment to promote a better understanding of the American people on the part of the people we serve. And, now is our moment to win a true victory for humanity."

I wish we all could have heard Kevin Clarke deliver that speech in person. I'm sure that he speaks for us all, Volunteers and staff alike. I know he echoes my own thoughts.

I think there is no other group of people today who exemplifies the theme of this holiday season of "Peace on earth, goodwill to all men and women," better than Peace Corps Volunteers. Please accept my very best wishes for a happy holiday season and joyous New Year.

> Loret Miller Ruppe Director

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In Memoriam

It is with great sadness that Peace Corps announces the recent deaths of four Volunteers. Charles V. Turner, a Volunteer on the central Philippine island of Cebu, was killed on October 17, during a robbery at his home. William J. Mathis Jr., a PCV in Lemufu, Zaire, died on October 23 in an auto accident. Peter H. Wolfe serving in Guatemala City, Guatemala, was killed on October 27, during an apparent robbery. On November 1, Lesa Sanftleben, a Volunteer in Leribe, Lesotho, was slain in a robbery at her residence.

Charles Turner, 49, from Omaha, Nebraska, had been assigned to a rural income development project in the Philippines since October 1982. While performing his technical role with great distinction, Turner was also instrumental in arranging medical operations for children in his community. He was recently commended by a Filippino newspaper for saving the life of a fisherman during a typhoon.

William Mathis Jr., 28, of Cleveland, Ohio, was a rural water technician on a project sponsored by the Zaire Agriculture Department. On this assignment for just three months, Mathis had already completed the improvement of two wells serving over 2,000 villagers and was developing plans to improve 14 others at the time of his death.

Peter Wolfe, 30, of Belmont, Michigan, was sworn into service in June 1983. He was an environmental education specialist with the newly created national parks program under the auspices of the Guatemala National Tourist Institute. During his tenure, Wolfe successfully planned and coordinated environmental education programs including a national conference on resource conservation and developed educational resources including a library for research and a slide presentation on wildlife conservation.

Lesa Sanftleben, 29, of Grand Blanć, Michigan, began her duties as a Volunteer on August 11. She graduated in June from the University of Minnesota with a degree in civil engineering. For the past three months she had been working on a water supply project in Leribe, a village near Maseru, the capital of Lesotho.

Each of these Peace Corps Volunteers was making a significant contribution to the communities they served and their loss will be deeply felt by those communities and by all of Peace Corps. Peace Corps expresses its profound gratitude for their sacrifices, dedication and service to America and to worldwide peace and friendship.

Peace Corps Times

Peace Corps Director Loret Miller Ruppe **Deputy Director** Edward Curran **Public Affairs Director** Hugh O'Neill **Peace Corps Times Editor** Dixie Dodd

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Budget.

Asantehene of Ghana Honored by Peace Corps

Peace Corps honored the Asantehene Otumfuo Opoku Ware II of Ghana and his wife, Madame Victoria with a special reception on Oct. 24 in the United States Senate Caucus Room. The Asantehene is the spiritual and cultural leader of the Asante people, several thousand of whom live in the United States.

Ghana was the first country to invite the Peace Corps to its shores and a special relationship has existed between our peoples for the past 24 years. In August of 1961, 51 Volunteers went to Ghana as teachers.

Peace Corps Director Loret Ruppe presented a certificate to the Asantehene to symbolize that friendship. The Asantehene, in turn, presented Peace Corps with a miniature replica of the symbol of his hereditary office, the Golden Stool.

The Asantehene and his entourage were colorfully adorned in their Ghanaian dress of Kente cloth, material handwoven in traditional symbolic patterns. A troupe of Ghanaian dancers, Odadaa, from the Washington area performed traditional dances as a part of the festivities.

Ray Spriggs, a member of Ghana I, the first group of Peace Corps Volunteers, spoke during the program.

In his remarks, Spriggs paid tribute to his host country by saying, "It is fitting to reflect on those institutions that have given sustanance and have nurtured our people's pride and courage...certainly among those institutions are the traditions and customs of the Asante people of Ghana." His project in Ghana was teaching English and economics.

Ålso speaking was Bruce Doneff, a Volunteer who returned from Ghana last year. He served as an agriculture specialist there.

"No matter how many trials and tribulations the Ghanaians must struggle through, when the pendulum swings back, Ghana, once again, will be the 'Black Star' of Africa,' Doneff said.

Many RPCVs from Ghana now living in the Washington area attended the festivities.

Currently, Peace Corps has 41 Volunteers working in Ghana. One, who has been there ten years, is Sister Madeline Chorman who manages a canteen at the Korle Bu Hospital in Accra. She was named one of Peace Corps' Outstanding Volunteers in $198\bar{2}$.

As Director Ruppe said in her remarks, "We all look forward to another 24 years of success with our Ghanaian friends helping to improve the quality of life in Ghana as well as to improve the prospects for world peace and friendship."

The Asantehene and his entourage came to the United States to preside at the opening ceremonies for a special exhibition, "Asante: Kingdom of Gold," at the American Museum of Natural History in New York City. The exhibit will be there through March. This is the first time the Asantehene has visited America since he ascended the Golden Stool on July 27, 1970.



Peace Corps Director Loret Ruppe presents the Asantehene with a certificate which symbolizes the friendship between our two countries.

Asantehene reception photos-Anne Alvarez

The Asantehene visits with Franklin Moore, Associate Peace Corps Director for Agriculture in Ghana from 1978 to 1980. Moore had previously been a guest lecturer at the University of Science and Technology in Kumasi, Ghana.



Focus—Haiti



Peace Corps Representative Bert Laurent (right) administers the Volunteer oath in Creole. The English segment of the dual ceremony was conducted by Peace Corps Director Loret Ruppe.

Photo-David Scotton

Peace Corps and Haiti

Peace Corps opened an office in Port-au-Prince in December of 1982. On March 31, 1983, the first group of eight Volunteers, all of whom transferred from other countries, arrived in Haiti. Currently, Peace Corps has 21 Volunteers in the country.

Peace Corps' efforts have been concentrated in the areas of agroforestry, health and nutrition, fisheries, vocational education and community development.

Once completely forested, Haiti is now estimated to have a tree cover of only eight percent of its land. The destruction of forest over the years for fuelwood and charcoal has caused soil erosion, desertification from lack of water retention and general decline in agricultural production. Peace Corps, in conjunction with other international agencies and the government of Haiti, has undertaken projects to promote the growing of trees to halt soil erosion and for an increased supply of fuel.

Due to the decline in traditional agricultural production, Haitians found need to cultivate another source of food, namely in inland fisheries. PCVs are working with the government in fish farming in many inland locations to provide high protein foods to help alleviate problems of shortages and malnutrition.

With 80% of its population living in rural areas, there has been considerable need for vocational training on the community level. PCVs are involved in vocational education and are training rural Haitians in skills such as carpentry, welding, masonry, cabinet-making and food preserva-

The high density of population, as well as the decline in agricultural production, has caused Haiti to take new steps in health and nutrition planning. Currently, a contingent of Peace Corps health specialists are working as health educators and extension agents, as water supply and sanitation technicians and maternal and child health specialists.

Some Volunteers in the latest group, which were officially sworn in on September 20, will be involved in crafts marketing and community development projects.

About the country

Population: 5.7 million

Religions:

Land Area: 10,714 square miles,

about the size of

Maryland

Major Cities: Port-au-Prince (capi-

tal), Cap Haitien

Languages: French (official), Creole (majority)

> Roman Catholic (majority), Protestant

(10%), voodoo practices

Coffee, bauxite, light **Exports:**

industrial products,

sugar, sisal

Climate: Warm, semiarid Borders: Dominican Republic,

Caribbean Sea.

The Republic of Haiti occupies one-third of the Island of Hispaniola in the Caribbean Sea, located between Puerto Rico and Cuba. Haiti shares the island with the Dominican Repub-

Columbus discovered Hispaniola on his first voyage to the New World in 1492. In early colonial times the Spanish used the island as a dropping-off point for the exploration of the western hemisphere. French buccaneers later used the western third of Hispaniola (then call Saint-Dominque) as a base to harrass English and Spanish ships. In 1607, Spain ceded the western third of the island to France.

Peace Corps estimates that by the end of 1985, there will be about 50 Volunteers serving in Haiti. Plans call for health specialists, immunization technicians, university teachers, marine fishery specialists and more agroforesters.

No story about Peace Corps/Haiti would be complete without mentioning the Grand Ole Man of the Peace Corps Odilon (Odi) Long. Long, 82, is completing 14 years of Volunteer service and was part of Haiti I. He has served in rural construction projects in Gabon, Togo, Sierra Leone and Burkina Faso (formerly Upper Volta). At present, his site is Petit Trou de Nippes, where he is supervising construction of a school, water system and a community center.

During the French colonial period, many slaves were brought from Africa to work the sugar and coffee plantations. Then in 1791, the slaves. led by Toussaint Louventure, revolted and gained control of the northern part of Saint-Dominque. In 1804, they established independence from the French and renamed the area Haiti. Thus Haiti became the first country in Latin America to revolt successfully against European colonial rule.

During the early 1800s, the northern part of the country was ruled by Henri Christophe and the south by Alexandre Petion. Christophe ruled from the Sans Souci Palace and started work on the castle, the Citadel, which some say is the eighth wonder of the world. The work on the Citadel was never completed although it was estimated that at times as many as 10,000 people were living inside the fortress.

The country was finally united in 1818 under General Jean Pierre Boyers who became its first president.

Today, Haiti is one of the most densely populated countries in the western hemisphere. With only onethird of its land being arable, Haiti has also become one of the hemisphere's most economically disadvantaged countries.



Going over plans for the restoration of the legendary Sans Souci Palace (in the background) are Haitian Patrick Delatour, Howard graduate and chief architect of the project; Dr. James Cheek, president of Howard University; PCV Knute Brinchmann, and Peace Corps Director Loret Ruppe. Brinchmann is a resident of Washington state and holds degrees in architecture and building construction.

Photo-David Scotton

Country Representative

Bert Laurent, Peace Corps Representative, was born in Haiti and has made repeated visits there through the years. Laurent's first Peace Corps assignment was as Associate Director for Agriculture and Rural Development in Mali.

Before joining Peace Corps, he worked at the African-American Institute in Washington, D.C., and at the Department of State in the Language Services Division. He has a master's degree in agricultural anthropology from Columbia University.

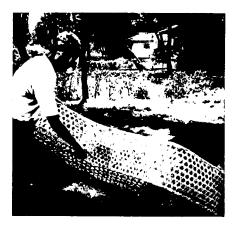
Laurent, and his wife, Krystyna, have three small children, Patryk, Danny and Mark.

Dixie Dodd



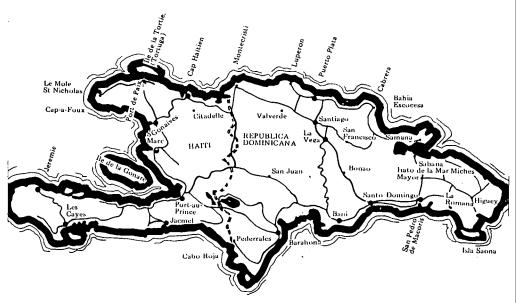
Although French is the official language, the majority of Haitians speak Creole. Here, new Volunteers practice conversational Creole. Photo-Hugh O'Neill

Hispaniola—Haiti and the Dominican Republic



PCV Matthew Fitzgerald of Middletown, N.J., gives a dry-land demonstration of how a fish cage works. Fitzgerald, formerly a Volunteer in Equador, graduated from the University of Delaware with degrees in biology and chemistry and has worked stateside as a marine biologist.

Photo—Hugh O'Neill

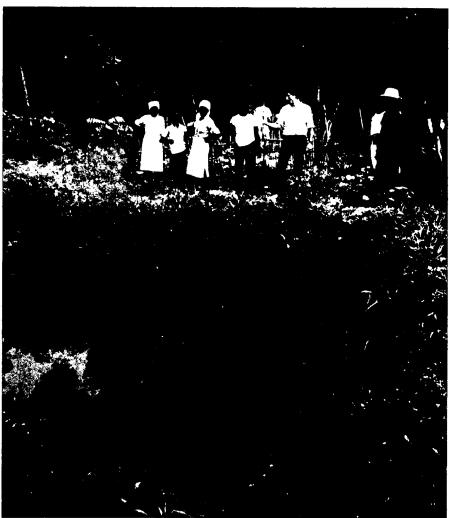


The Dominican Republic will be featured in the next issue of Peace Corp Times.



Agroforester Mike Jenkins (right), checks young plants at the CARE/Peace Corps nursery project in Jean Rabel. Jenkins, a graduate of Colgate University, was born in Thailand, but calls Washington, D.C. home. Prior to Haiti, he was a Volunteer in Paraguay.

Photo—Hugh O'Neill



Aquaculture specialist Philip Berns of Stamford, Conn., discusses the benefits of fish farming with Haitians at one of the six fish ponds in the Mare Rouge area. Berns graduated from Cornell University with a degree in biology and agriculture and was a PCV in Ecuador.

Photo—Hugh O'Neill

Personnel/Personal Notes

Ion Keeton has been named Associate Director for the NANEAP Region. Keeton has served Peace Corps in many capacities, the first as a Volunteer in Thailand, 1965 to 1967.

He was Country Director of Korea, 1974 to 1976; Deputy Director of Korea, 1973 to 1974; Country Desk Officer for Micronesia, 1972 to 1973; Associate Director of Thailand, 1970 to 1972 and a recruiter, 1967 to 1968. He was with VISTA from 1969 to 1970 and for the past seven years he has been involved in real estate.

Keeton graduated from the University of California and received his master's degree from Columbia University. He speaks Thai, Korean and Japanese.

New Chief of Operations for NANEAP is Bill Lovelace who has been a senior program analyst in ACTION's Office of Policy and Planning since 1980. Lovelace was a PCV in Sierra Leone, 1963 to 1965.

He has also held several staff positions with Peace Corps. From 1968 to 1972, he was the language program director at the Peace Corps training center in the Virgin Islands for French-speaking Africa; training officer for the Africa Region, 1972 to 1974 and area director for Francophone Africa until 1978.

A graduate of the University of Texas, Lovelace is fluent in French, Russian, and German.

* * * *

Bruce J. Cohen has been appointed

to the position of Director of Recruitment.

A PCV in Tunisia, 1967 to 1969, Cohen has been the Chicago Service Center Director since 1978. He has also served as a recruiter in Indianapolis and as area manager in Miami and Atlanta.

Cohen received a bachelor's degree from Georgetown's School of Foreign Service and a master's degree from Illinois State University.

Merni Fitzgerald of Public Affairs, was one of fifteen people designated by the Commonwealth of Virginia to receive the biennial Outstanding Child Advocate Award.

Fitzgerald was nominated for this honor, which is given "for improving the quality of life of Virginia's children and youth," for her seven years as an adult volunteer with the Girl Scouts. She is the mother of two daughters, eight and five years old.

The new Medical Operations Division Chief is Dr. Theresa van der Vlugt. She has previously served Peace Corps as the medical contractor in Kathmandu, Nepal for five years.

Dr. van der Vlugt received her medical degrees in obstetrics and gynecology from Louisiana State University Medical Center and public health and preventive medicine from the Tulane School of Public Health and Tropical Medicine.

Cameroon Country **Director Chosen**

Katherine Chang Dress has been named Country Director for the African country of Cameroon.

"I've always considered the world my village and myself as a citizen of the world," said Dress who was born in Kwenming, Yunnan, China. As a child she traveled widely with her father, a physician with the United Nations and the World Health Organization. The family lived in the Philippines, Germany, Switzerland, Egypt and Ethiopia.

Dress attended Chung Chi College in Hong Kong and graduated magna cum laude from Haile Selassie University in Addis Ababa, Ethiopia. She received a master's degree in English literature from Bryn Mawr College and is fluent in French, English, Italian, German, and Mandarin and Cantonese Chinese.

Prior to accepting the position with Peace Corps, Dress was the Confidential Assistant to the Deputy Director of the Minority Business Development Agency. She was the Special Assistant for Administration and Finance at the National Republican Heritage Groups Council and Executive Vice President of Overseas Business Associates.

In Addis Ababa, she worked as a stringer for CBS News, as a producer for the Radio Voice of the Gospel and as a writer for the Ethiopian Herald. In Asmara, Ethiopia, she was the Consuler Assistant to the United States Consulate General. Dress and her husband, Richard, have one son, John Peter who is a senior in high school.

Kudos For PC/Jamaica

This article is reprinted from the 150th anniversary issue of the Kingstown, Jamaica, DAILY GLEANER.

Minister of Youth and Community Development, the Hon. Edmond Bartlett has praised the Peace Corps for the role it has played in Jamaica's development over the years and said it will have a role in Youth Thrust '84.

Minister Bartlett's comments came as he addressed members of the Walkerwood Community Centre in Moneague, St. Ann.

A release from the Jamaica Infor-

mation Service stated that the Centre operates a wood spinner project which provides employment for members of the community. The Minister was told by the Member of Parliament for the area, Mrs. Patsy Pink, that the Peace Corps Volunteers have been playing a tremendous role in the development of the project.

In acknowledging this contribution, Mr. Bartlett noted the efforts of Peace Corps Volunteers in his own community during boyhood days and said these efforts had continued to provide great inspiration and assistance to numerous young people across the island.

He referred to the Volunteers' involvement in areas such as sports and youth club programmes and said this was helping to co-ordinate activities and "unravel talent" and creativity in the communities.

Minister Bartlett disclosed that there would be a stepped up role for the Peace Corps and volunteers from other parts of the world in the Youth Thrust programme and said the details of this were being worked out by his Ministry.

To Your Good Health_

One Man's Experience

Recently, while I was on a medi-vac to the States, the Peace Corps/ Washington medical office ran tests to cover a wide gamut of problems with the idea of getting everything cleared up before I returned to my site (in the Philippines).

During these tests, it was discovered that I had hookworms. Medicine was prescribed and I took it for the required length of time. It turned out that when the pills were gone so were the hookworms.

Because I had had this problem, had not known about it and had felt no symptoms, I began to wonder where and how I had contracted this parasitic disease and about the overall health conditions of PCVs in the field.

The nurse informed me that one way of getting hookworms was through the feet (i.e., going barefoot) and that the disease was asymptomatic—you had it, but like many other illnesses, you felt all right and showed no symptoms. This brought back thoughts of the many days, mostly during the rainy season, that I had gone barefoot, wading through ankle, and sometimes knee deep, mud to get from my village to the road. The probability of keeping shoes on my feet through the deep mud was almost nil. Plus, the convenience of just throwing my shoes in the backpack and "going native" until I reached town, kept me from wearing my shoes. It also gave me a case of hookworm.

This problem of "convenience versus precaution" seems to be worldwide among PCVs. Sometimes it is practically impossible or impractical to follow all the health precautions that the medical office recommends and consequently, some Volunteers become ill. And because of illness, time is lost away from the site, sometimes interrupting the projects at the worst possible time—to say nothing of the horrible feeling of being ill.

I am not an advocate of either the medical staff or PCVs, but I would like to state, as objectively as possible, the opinion of one Volunteer, myself.

With all the health and nutrition problems of third world nations, PCVs abroad don't eat as well (nutritionally) as they do in the USA. Over

a period of time, our bodies get run down and our resistance is low—we become more susceptible to disease. To avoid being ill, precautions from the medical office should be followed as closely as possible.

Every Volunteer will not be able to follow every suggestion—but because some things are unavoidable (even when taking necessary medicine regularly and sleeping under a net with mosquito coils burning, it is still possible to get malaria) advice from the medical office becomes all the more important.

There are more than enough illnesses just waiting for us out there without some PCVs cutting corners and/or forgetting to take medication. By not taking care of yourself properly, the people you end up hurting when you become ill (besides yourself) are the people at your site.

Most of us could devote a little more time to safety and health care and thereby benefit ourselves and the people we live and work with—the people we have committed ourselves to help.

Chuck Crimmins/PCV Philippines Editor's Note-Since PCV Crimmins wrote this article, he has been medically terminated (much to his and our dismay) from Peace Corps for a back injury. A few weeks ago we had a call from him—he was in the hospital in Texas with malaria. He told PEACE CORPS TIMES he was writing to his fellow Volunteers to urge them to take good care of themselves. We hope that you can benefit from his sad experiences. On an upbeat note, he also told us he was thinking about becoming a Peace Corps Recruiter. During all his tribulations, his personal commitment to Peace Corps and trying to make this a better world has never wavered.

The Third Most Common Problem

According to Peace Corps' Office of Medical Services accident injuries are the most common health problems facing Volunteers. Mishaps occur at their work site and during recreational activities. Some have been minor and others have been major, either resulting in a medical evacuation or death. The second most common health problem is skin infections and the third, gastrointestinal problems.

Gastrointestinal problems have many causes—with parasites leading the list. One problem that faces Peace Corps Volunteers who work in and around fresh water is schistosomiasis. Schistosomiasis is caused by a parasite that thrives in fresh water. Though the amount of reported cases of schistosomiasis is small, medical services suspects that incidence of this illness among the Volunteer population is high.

Peace Corps is conducting a study of schistosomiasis among Peace Corps Volunteers in Sierra Leone in conjunction with the National Institutes of Health. The NIH/Peace Corps study will determine the incidence of schistosomiasis and identify the best screening test. In the past, the only screening tests used were urine and stool samples. The NIH/Peace Corps

study will use blood samples to detect the existence of parasites.

Schistosomiasis begins with a parasite called schistosome. The schistosome produces ova in human and animal bodies which is excreted in the feces. When the feces comes in contact with water, it hatches miracidium which enters the body of snails and develops into cercariae. The cercariae emerges from the snail and roams in water until it gets the opportunity to penetrate unbroken skin in the body of human beings and animals. The schistosome lives in the bladder and intestinal tract until it matures into an adult.

The adult stage is when the parasite becomes the most dangerous. It can have disastrous results on the bladder and intestinal tract and schistosomula have the uncanny ability to pass from these two organs into the blood stream and affect the central nervous system. Earlier this year a Peace Corps Volunteer contracted schistosomiasis and unfortunately the disease left him paralyzed.

Acute symptoms of schistosomiasis which appear immediately and are usually severe in nature, include fever, skin rash, headaches, joint pains,

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PCVs—We Need Your Help!

Corps V Corps' ou c Corps/Wa. On in your home lege newsletters journals.

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One way you car in recruiting is Corps/Washin m your hor lege new journal

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Peace Corps Volunteers in the field are Peace Corps' best recruiters.

One way you can really be of help in recruiting is by assisting Peace Corps/Washington in placing articles in your home town newspapers, college newsletters and in professional journals.

Many of you have (or will be receiving) "hometowner" questionnaires. Please complete them with as much detail as possible and return them to the address indicated. The Office of Marketing will develop your material for publication. And please, send along black and white photos, if you have any, of your activities with host country counterparts. Include captions identifying yourself and what you are doing and where.

Most editors welcome articles about their community residents serving abroad. Potential Peace Corps applicants see these stories and can visualize themselves in your place. You can tell the Peace Corps story better than anyone. So, please return your "hometowners" as soon as you can.

If you have not received one of the questionnaires, ask your Country Director for one.

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chills, cough, loss of appetite and diarrhea. Chronic symptoms which are long term and less severe include soreness, weakness of loins and thighs, a decreased ability to work, and enlargement of the liver.

There are five species of schistosome, only three affect humans. Two affect the intestines, the other the bladder. Acute symptoms usually appear with s. japanocium, which affects the bladder.

Volunteers who work with fisheries, agriculture, water and sanitation projects are the most likely to come in contact with schistosomiasis. The parasite can be eradicated at anytime during its life cycle.

Suggested precautionary measures are avoiding water which is suspected of contamination by the snails, using bridges, and wearing rubber boots.

Volunteers who experience the aforementioned symptoms and have been in contact with infected water should alert the local Peace Corps Medical Officer. Drugs used to combat schistosomiasis have greatly improved over the years. At one time a

New Options For RPCVs

In an effort to keep returning Volunteers abreast of the educational and vocational opportunities open to them, the staff of Returned Volunteer Services has two new programs to

The University of Houston will make one assistantship (\$500 a month) available per year for a returned Volunteer who is admitted to its master of business administration or master of science in accountancy program. This assistantship may be renewed, depending upon student's performance and availability of funds. Complete application information is available from: Mary Gould, Administrator, Graduate Programs Office (110-H), College of Business Administration, University of Houston, Houston, TX 77004.

Goddard College offers on-campus and off-campus, individually planned study leading to bachelor's and master's of arts degrees in organizational leadership, teacher education, psychology and counseling, literature and writing, environmental sciences, visual and performing arts, feminist studies, social studies and cultural, historical and philosophical backgrounds to contemporary issues. Peace Corps experience may be assessed as worth up to a full academic year of undergraduate credit. Graduate assistantships paying campus room and board may be available after one semester of graduate study. Other financial aid is based on financial need. Write: Admissions, Goddard College, Plainfield, VT 05667.

Due, in part, to the great response from older Volunteers to a story in our last issue, RVS is preparing a new manual which will deal with job hunting, other volunteer opportunities and retirement options for older Vol-

This new manual will be available to all older Volunteers through an order form in the Career Resource Manual.

patient had to be hospitalized just to monitor the side effects of the drug. Now, according to Medical Services, the side effects of the drugs are almost non-existent.

Patti Raine

Peace Corps and United Nations Volunteers Partners in Development

Since 1971, the Peace Corps has sponsored more than 260 Americans as UN Volunteers-nearly half of them in the past three years. Over 60 per cent of these volunteers have served previously as Peace Corps Volunteers. These highly trained professionals have worked with their counterparts from more than 70 countries in development projects ranging from monitoring the crocodile populations in Papua New Guinea to computer programming in Burundi. Peace Corps' contributions to UNV's Special Voluntary Fund also have made it possible for professionals from developing countries to serve as UN Volunteers.

The United Nations officially recognized the role of voluntarism in international development with the creation of the United Nations Volunteers in 1970. The first volunteers went into the field a year later. The program's principal objectives are to provide developing nations with an additional source of qualified and highly trained manpower; to give professionals the chance to contribute to worldwide development; and to make the energy and talents of these volunteers available to UN agencies and member states.

The first group of some 40 UN Volunteers has grown into a program that is both widespread and diverse. Over 900 volunteers are now working in the economic development programs of African, Asian, Caribbean, Latin American, Middle Eastern and Pacific nations. Their ranks include agronomists, doctors, librarians, computer specialists, engineers, teachers, geologists, architects, foresters, mechanics, carpenters and other specialists in some 60 professional groups. In addition to making their skills available, UN Volunteers help train host country personnel to continue the volunteers' work when their assignments have ended.

Volunteer Selection

Qualifications for UNV service are more demanding than those for most of Peace Corps' programs.

Each volunteer must have a minimum of two years' working experience in his or her profession or trade. He or she must have earned a degree from a college or university, often at the advanced level, or hold a technical diploma. In certain skilled trades such as carpentry or bricklaying, professional experience naturally substitutes for advanced degrees.

UNVs must be at least 21 years old; most are between the ages of 25 and 35. Other basic requirements include proficiency in English, French or Spanish; good health; and the willingness and ability to withstand unfamiliar climates and living conditions for the minimum two-year assignment. Married candidates may apply but are sometimes difficult to place because of such constraints as limited housing and the lack of other facilities needed by families.

they completed service. These returned volunteers must only supply three references and meet UNV assignment criteria.

Once approved by the Peace Corps, the candidate's application is sent to the program's headquarters in Geneva, where it is carefully evaluated. The names of accepted candidates are placed on a roster that contains 140 occupational categories. A country asking for volunteers usually has a particular project and particular skills in mind; volunteers on the roster are selected by how nearly their skills match the request. Final approval of candidates for a particular assign-



United Nations Volunteer in China.

The selection process for UN Volunteers is highly competitive; out of over 900 volunteers now serving, only 40 are American. An effort is being made to increase the number of American volunteers especially en-English-as-a-Second-Language teachers, computer specialists, librarians, and others with scarce skills.

The selection process for Americans begins at the local Peace Corps recruiting office or regional service center. A candidate first must go through the usual Peace Corps selection procedures, including an interview; this requirement is waived for returned Peace Corps Volunteers applying within one year of the date

ment is made by the host country. Candidate placement often proves lengthy—as long as six months after Peace Corps' initial clearance.

UN Volunteers receive certain benefits for their service. The Peace Corps pays for travel to and from the country of assignment and also picks up the cost of any other international travel by the volunteer required for emergency leaves, medical evacuations or transfers. UNV provides each volunteer with a monthly stipend sufficient for modest living expenses. Inexpensive living accommodations are made available; so is a settling-in grant for household purchases.

(continued on page 11)

It's Not 7th Avenue, But It's A Start

Threads of economic stability are literally being sewn into the commercial fabric of a Honduran town with sewing machines provided by an American chemical company.

Pfizer Foundation, Inc., a New York based philanthropic arm of the Pfizer Corporation, donated \$2,500 to a sewing cooperative in Tegucigalpa through the Peace Corps Partnership Program. The money is the first step down a long road toward economic stability for 100 tailors who are members of the co-op and, eventually, the entire city.

The tailors ultimately hope a fullscale clothing factory can be established in the two floors above the existing cooperative where they operate foot-pedaled sewing machines. Until money for the new machines was provided by the Pfizer Foundation, tailors labored four hours on a single pair of jeans. New machines reduce sewing time to 48 minutes per pair of jeans, and blouses take a mere 20 minutes. Both jeans and blouses are of a much higher quality which increases the products' competitive edge in the Honduran marketplace.

The tailors have done a market survey," reports Peace Corps Volunteer Richard Wehling, adviser to the cooperative. "There is a need for good quality, medium priced apparel of this type. Once this small pilot factory becomes fully operational, individual members of the co-op will market the goods in Tegucigalpa and other nearby towns.

"The main problem hampering growth of the co-op is lack of capital to acquire and stock sufficient amounts of new inventory—cloth, thread, needles, zippers-things such as these. After 14 years of struggle, this co-op has matured and learned," Wehling said. "It is poised on the point where, with the infusion of sufficient capital, results could be dramatic."

The sewing machine financing provided through the Peace Corps Partnership Program is only the beginning. The cooperative must prove a successful track record before it can apply for further financial assistance from local banks or other internaagencies. Approximately \$160,000 will be needed to remodel the top floors of the building and provide more sewing machines and ac-

The Pfizer Foundation helped purchase five machines. An earlier donation by the Patrick and Anna M. Cudahy Fund, administered by Richard W. Yeo of Milwaukee, was also made through the Peace Corps Partnership Program. In return for contributions to the co-op, they will receive frequent progress reports on the project and the lasting friendship of the people they have assisted.

Wehling, a resident of Aurora, Ill., feels an overwhelming pride in the co-op tailors and staff. "It has been a rare privilege for me to associate and

work with these Hondurans. It does seem that this type of grassroots approach can do much in aiding the social-economic stability and progress of Honduras," he said. "I am impressed by the concept of starting as a small, controllable venture and growing as the business profits grow. The ripple effect of this venture could be considerable."

Sherrod Shim

(continued from page 11)

Other program benefits include free health and life insurance. At the end of the two-year assignment, each volunteer receives a resettlement allowance from the Peace Corps of \$175 for every month of service.

Peace Corps' Involvement

The Peace Corps and the United Nations volunteers address different, but equally important manpower needs of developing countries. UN Volunteers are highly trained and experienced professionals. They fill middle and senior level positions in a large variety of government and UNsponsored projects. These posts carry substantial responsibility and opportunity for individual initiative. UNVs are, in the words of one American volunteer, "people who are highly specialized in their fields. They are expected to know their profession and practice it in a professional way.'

The UNV program also has the ability to serve in some 30 countries where Peace Corps has no bilateral programs—the People's Republic of China, Turkey, Ethiopia, Somalia and others.

The Peace Corps also recognizes the importance of the UN Volunteers in fostering the growing understanding that the individual's efforts and will to help others—voluntarism -can play a vital role in development. The United Nations Volunteers offer people from all UN member states, regardless of economic circumstances, the chance to contribute to this worthwhile endeavor. Indeed, UNV is unique among international volunteer organizations in that it draws its manpower from both developing and industrialized nations. In so doing, the program is seeking, says its Executive Coordinator Hikmat Nabulsi, to make the "V" in development stand for "volunteer."





PCV Richard Wehling (right) and members of the Tegucigalpa sewing cooperative examine new bolts of cloth.

The Sudan—Peace Corps' Newest Program

Five Peace Corps Volunteers arrived in Khartoum in late September to assist the Georgia Institute of Technology, Energy Development International and Transcentury Corporation in completion of the Sudan Renewable Energy Project.



James Adams sizes adobe bricks for building the adobe stoves.

Photos-Patti Raine

Funded by USAID in 1982, SREP was designed to help combat the deforestation, desertification, and soil erosion resulting from the massive use of wood-Sudan's principal source of fuel. Recent estimates indicate that wood is being used at a rate of 14 million tons annually. Most of this is obtained from Sudan's natural forests and desert scrubs for consumption in rural areas.

Bordering on Egypt and the Red Sea, Sudan is the largest country in Africa and its economy is now being affected by deforestation. A major export, gum arabic trees, are disappearing at an alarming rate and the loss of forests causes the desert to advance by 5 to 6 kilometers each year, affecting the fragile semi-arid zones. The five Volunteers are assigned to reforestation projects.

Peace Corps Volunteer James Adams, from Bonfield, Ill., is serving as a fuelwood extension specialist. He will help farmers build and operate forestry nurseries, plant trees to prevent soil erosion and introduce trees that are combination fuelwood and wind shelter breaks. The farmers that Adams will assist have received agroforestry grants under the SREP. A 1977 forestry management graduate of Utah State University, Adams worked eight years with the U.S. Forest Service.

Mary Clarkin, of Wichita, Kans., and Bradley Tyndall of Littleton, Colo., will provide Adams and the SREP with communication support. They will publish pamphlets and manuals, develop training courses on the manufacture, use and maintenance of charcoal and woodburning kilns and stoves, and organize public information centers. Clarkin and Tyndall share backgrounds in journalism.

Two other Volunteers are serving as charcoal production and fuelwood combustion specialists. Jon Dorre, of Davis, Calif., will teach farmers a more efficient way of processing wood into charcoal. In some instances wood must be transported as far as 350 miles. Though wood is a more efficient means of fuel, charcoal is easier to transport. Dorre has a bachelor's degree in renewable natural resources from the University of California.

Kevin McNally, of Norwich, Calif.,

will construct and test new wood fuel combustion systems, disseminate successful test design and monitor and evaluate new wood fuel combustion systems. McNally, a graduate of the University of Connecticut in Storrs, says he is particularly interested in introducing metal stoves for use in the

The Volunteers will be under the supervision of the Renewable Energy Research Institute and a SREP/PCV administrator, who is a returned Peace Corps Volunteer. There will be no formal Peace Corps office in Khar-

"There's a growing urgency within developing countries to curb their near annihilation of forests and wood products," Peace Corps Director Loret Ruppe said. "The Energy Project is a unique, multi-level program which targets basic, everyday practices of wood and charcoal users. Northern Sudan faces tremendous challenges and Peace Corps is anxious to begin the step-by-step process of improving energy related techniques."

Patti Raine



In training for service in the Sudan, (clockwise) Kevin McNally, Mary Clarkin, Bradley Tyndall, Jon Dorre and James Adams build an adobe. fuel-conserving stove. Similar stoves will be introduced in rural Sudanese communities.

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From The Field

Rice/Fish Culture/Thailand

The following has been excerpted from Extending Freshwater Fish Culture in Thailand, a manual produced by fisheries Volunteers in Thailand. Collaborating on the manual were PCVs David Hanks (editor), Bryan Baker III; Elizabeth Bergey, Donna Hartman, Ronald Rice and Robert Rode, who contributed most heavily to this chapter. Illustrations are by PCV Ronald Rice.

Rice fields can provide a farmer with a unique and suitable environment for raising fish. Rice paddies are populated with a rich assortment of algae, crustaceans, and insectspotential food for a number of fish species.

Every farmer is familiar with the wild fish (snakehead, catfish, and others) that inevitably occupy their fields, and many go to great lengths to cap-

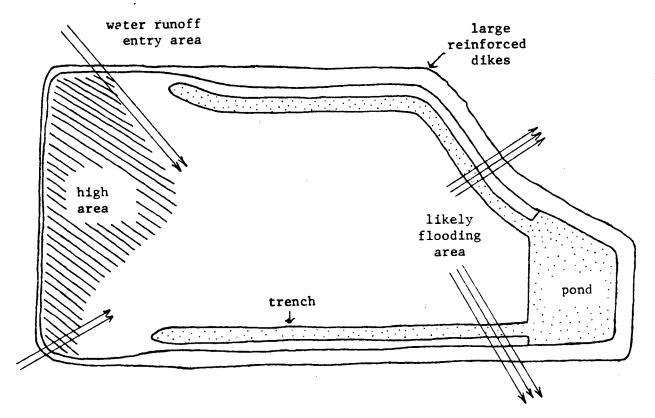
ture these fish by either setting traps or digging small "capture" ponds. However, it is the rare farmer that will invest time and/or money to construct a system in his fields with fish culture in mind. Little data is available regarding fish culture in rice paddies, but it is more and more being considered a subject worthy of future extension work because of its low investment cost and ease of implementation.

Field Selection (Rain-Dependent Site)

The field in question should have a history of holding water for at least three to four months, the minimum time necessary for adequate fish growth. Areas that receive year-long rainfall or that have access to irrigation systems are ideal sites.

In areas like the northeast of Thailand, stricken with short, unpredictable rainy seasons, care should be exercized when selecting a rice field for fish culture preparation. A low-lying field which will receive abundant rainfall runoff is more promising than a field at a higher elevation with a comparatively smaller watershed.

Data concerning frequency of flash floods and deepest water levels should be obtained from non-biased (i.e., non-project) farmers before committing oneself to rice field preparatory work. Information on insecticide use (in the project field as well as fields within the watershed area) should also be obtained since insecticides can kill fish and possibly infect their tissues with chemicals dangerous for human consumption.



Field Preparation (Rain-Dependent Site)

Many farmers have small ponds (50–100 square meters) in their fields which are used to trap fish that randomly wander in. Although these ponds were not originally intended for fish culture, an effort should be made to link them to the final fish culture system.

In the dry season, ditches should be dug around the perimeter of the rice field. If feasible, these ditches should tie into any existing rice field pond in order to extend the pond's fishproducing capacity. Ideally the farmer will have had the foresight to dig the pond at the field's lowest elevation point, realizing that water and fish will naturally pool there as water levels recede. Ditches leading into the pond should be constructed so that water will naturally flow into the pond as the dry season progresses. If the field lacks a pond, one can be constructed by enlarging the canal area in the lowest part of the field.

There is a tendency to dig trenches with vertical sides as labor costs are based on volume of earth extracted and calculations of rectangular volumes are simple procedures readily understood and trusted by villagers. Nonetheless, every effort should be made to construct sides with a slope in order to reduce erosion, particularly if the soil lacks a strong clay base. If not properly constructed and maintained, erosion can fill the ditches with dirt within one or two growing seasons, rendering the project worth-

Excavated earth is used to increase the height of the rice berm, thus protecting the field from flash floods and subsequent loss of fish. Tall rice berms and deep trenches increase the water-holding capacity of the rice field. The farmer can regulate the capacity by using a pipe located within the rice berm. A one-meter ledge, or space between the inner rice berm toe and the edge of the trench, should be provided to prevent any dike erosion from filing in the trench.

Finally, the rice berm should be seeded with vegetation (preferably a type that can be used as fish food) in order to further reduce erosion during the rainy season. Due to the increased height of the berm and the extra holding capacity provided by the trench rearing areas, water can be held for a longer period of time than normal (four to six months).

Field Selection (Irrigated

An "irrigated site" differs from a "rain-dependent site" in that

- The field in question is not limited to its immediate rainfall watershed; rather, the field is filled with water by simply opening irrigation gates.
- Water level within the field is easily manipulated by the farmer.
- The area is not subject to flooding during the rainy season.

In the rain-dependent discussion, large, deep trenches were necessary in order to store limited amounts of rainfall, thereby extending the fish culture period into the dry season. Large dikes were also constructed to protect the field against periodic floods during the rainy season.

In an irrigated site, the surrounding rice bunds are only meant to retain an adequate amount of water for rice culture. This water can be drained in or out of the fields as the farmer desires. The capacity to regulate water level and the luxury of having a year-round water supply obviates the need to construct large dikes and deep trenches. Because the field should not be susceptible to floods, dikes need not be very tall.

A 400-meter square field is the smallest area suggested for this kind of project. Irrigated sites are often subdivided into many smaller plots of slightly different elevation by small rice bunds. Water level in each plot is regulated by the farmer and water is gravity-fed into each plot from an irrigation canal. A field with these characteristics can also be used for a. fish culture project.

Field Preparation (Irrigated Site)

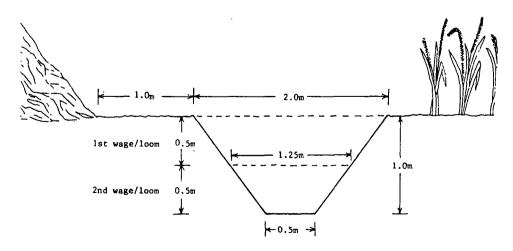
A trench should be dug along one side of the field in the field's lowest elevation; when water is drained to harvest rice, fish will naturally pool into the low-lying areas and will conveniently end up in the ditch. A trench with top width of one meter. bottom width of half a meter is adequate for this system.

The water intake (pipe or ditch) should be screened to prevent predacious fish from entering the field while irrigating it with water. The drainage site should also be screened to avoid losing cultured fish. If the field is composed of several plots of different elevation, screens should be. used when gravity-feeding water into the lower elevation plots to prevent all the fish from simply migrating into these areas and creating an overstocking problem.

Fry Rearing in Rice Field Ditches

Fry should be raised in the rice field pond and ditches to achieve fingerling size before the rice is planted. Since raising fish in paddies involves a relatively short period of time (four to six months), intense rearing of fry should be carried out to promote rapid growth during their first month. Large, healthy fingerlings raised in the ditches will withstand the harsh environment of a rice field better than young fry released directly into the same field.

When rainwater starts collecting in the rearing areas, manure and compost should be added in order to im-



TRENCH DIMENSIONS

prove water quality and the natural food supply for the fry/fingerlings. Once 50 cm of rainwater has collected in the rearing areas, fry should be stocked. Supplemental feedings of rice bran or waste foods will spur rapid growth of the fish, making them less susceptible to predation once released into the planted fields.

When possible, the fry/fingerling rearing areas should be closed off from the rice paddy in order to protect the soon-to-be-planted rice shoots from foraging fish. The rearing pond and a portion of the ditches can be closed off from the field by using earth or netting.

If earth is used, space should be provided between the ditch and toe of the temporary "separation" dike so that erosion does not fill the rearing ditch. Also, dirt should not be taken from the adjacent, outer rice berms as they are located in the lowest-lying area and their height is necessary to protect the field against flooding. Although netting is more expensive, it can be removed easily once it is deemed suitable to release fingerlings into the planted rice paddy.

Stocking Rates

Two different combinations of fish can be raised in rice paddy systems. Common Carp are used in both cases with either Tilapia or Tawes. A recommended stocking rate is listed below, but can be altered to suit the farmer's convenience or curiosity. Stocking rates should be conservative to avoid excess competition between the fish and rice plants.

Plan 1 Common Carp 100 fish/rai (1600 m²) Tilapia 200 fish/rai

Plan 2 Common Carp 100 fish/rai 200 fish/rai

Chinese Carp and Rohu are not raised in rice paddies due to their sensitivity to the high water temperatures often found in rice paddies.

Harvesting Fish

As water levels recede after the rainy season, fish will be forced into the rearing trenches where they can be easily harvested. Since these trenches are rather limited in area, it is suggested that fish be removed gradually, from the onset of the rice harvest until the water is too shallow

for fish growth and/or survival. This period may run from a length of one to three months depending on the water-holding capacity of the trenches, soil permeability, and weather. The longer fish growing season also allows the farmer flexibility in conducting the fish harvest and finding a market for the fish.

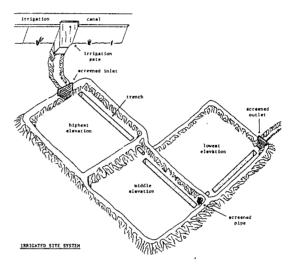
Projected fish yields from a rice paddy cum fish system run from 30kg to 100kg per rai of rice field.

Rice Production

Rice paddies which already contain fish should receive manure rather than chemical fertilizer applications. Chemical fertilizer pellets may adversely affect fish if ingested. Organic manures are safe to use and will prolier, insecticides should not be used: fish will serve as a biological control of many pests by consuming them and their larvae.

There is currently some debate on whether rice yields decline or increase when fish are raised in the same paddy. There are those who say that rice production can be expected to drop for the following reasons:

- Field surface area available for planting is reduced by the ditches and pond rearing areas.
- The use of chemical fertilizer is reduced.
- Insecticide use is eliminated.
- Fish are likely to eat rice plants. On the other hand, there are those who say that rice production actually increases for the following reasons:
 - Fish feed on algae and aquatic weeds, thereby reducing com-



mote rice as well as natural food production. Alternatively, if the farmer insists on using chemical fertilizer, suggest that the pellets be dissolved in water prior to application.

Rice is generally transplanted after the fields are moist or have standing water. Fish should be held in the nursery area until field plowing is completed and transplanted rice has been in place for 10-15 days. This will prevent the fish from being plowed under and will give the transplanted rice a chance to form new roots. If fish are free to enter the paddies beforehand, rice shoots can be easily uprooted, especially by Common Carp.

Many farmers favor a chemical fertilizer application after rice has been transplanted. Unless fingerlings can be contained within their rearing areas until the chemical pellets have time to decompose, the application should be avoided. As mentioned ear-

- petition for nutrients and space.
- Fish fertilize the soil with their • Fish aid in controlling pests by
- eating harmful insect larvae and worms.
- Fish oxygenate the soil when searching for food.

Although hard data is not available, Volunteers have found that the production of fish far outweighs any decrease in rice production. Also, since the selling price of fish is far greater than that of rice, few farmers are overly concerned after the first season. Fish provide the farmer with an excellent source of protein; they can also be marketed to obtain cash which can be used to purchase goods or foodstuffs. Experience suggests that the first year project suffers the poorest production of both rice and fish. Once the farmer learns how to manage the farm, production of both crops increases.

Sarvodaya: Voluntary Service for Development

The Feature section in this issue is excerpted from an article which first appeared in the Peace Corps Program and Training Journal, Vol. IV., No. 3, in 1976. Based on a conference paper by Mr. A.T. Ariyaratne, founder of Sri Lanka's Sarvodaya Shramadana Movement, the article is reprinted here as a resource for Volunteers and staff who may be working with or helping to establish indigenous volunteer organizations (sometimes called domestic development services). The Sarvodaya Movement, founded in 1958, is one of the oldest grassroots volunteer organizations and is still active in Sri Lanka today.

People's participation in development is not new to Sri Lanka. It is a tradition as old as the Buddhist civilization of the country itself. In the well-recorded 2500-year-old history of Sri Lanka, instances of the king working shoulder to shoulder with the commoner—knee-deep in mud in the paddy field, or joining in the construction work on tanks, irrigation works and religious structures—were fairly common.

The Sarvodaya Shramadana Movement—a well-known indigenous nongovernmental volunteer programdeveloped and grew in the context of Sri Lankan history (volunteeroriented). The Movement's goal is to help the people of Sri Lanka to build a new society from the village up. The path to this new society and life begins with the "awakening" of individuals, families and communities to their own potential. A major aspect of this awakening is helping people to understand that they can make and carry out their own "development plans" to meet their own needs and that they do not need politicians. This awakening of individuals, families and communities provides the life force for the Sarvodaya Shramadana Movement, which now involves thousands of individuals and villages all over the island of Sri Lanka.

The Sarvodaya Shramadana Movement was conceived in the mid-1950s. It took concrete form when teams of senior students (in the age group of 14 to 18) and teachers started organizing and actively participating in what were called Educational Extension and Community Service Camps

in "backward" villages of Sri Lanka. These camps lasted from three days to one month. Soon this program was open to non-students as well and it came to be popularly known from 1960 onwards as the Shramadana Movement of Sri Lanka. Shramadana literally means "gift or sharing of labor". It was later prefixed by the word sarvodaya, literally meaning "the welfare of all", when the movement was formally established as a non-governmental organization. Now it is a government-approved charitable institution incorporated by an Act of Parliament.

The Sarvodaya Shramadana Move-

and other problems of the country and organize educational and training programs for them to learn ways and means of solving these according to the Sarvodaya philosophy.

 To organize programs with a view to the eradication of distrust and disintegration springing from differences such as of caste, race, creed and party politics.

 To propagate qualities of selfless service, self-denial, cooperation, self-discipline and the dignity of labor amongst the people of the land.

• To encourage the development,



ment has the following general objects:

- To provide, through Sharamadana Camps and other constructive means, adequate opportunities and the appropriate mental climate for the realization of the principles, the philosophy and the objects of Sarvodaya—the wefare of all—by the Shramadana Sewakas and Sewikas—men and women who volunteer to engage themselves in village development and community welfare projects.
- To provide opportunities for youth to acquire a correct understanding of the socio-economic

- especially in the youth, of healthy views of social justice, equality, love of one's motherland and international brotherhood.
- To develop self-confidence, cooperation and unity among the urban and rural communities and to evoke their inherent strength to bring about an allround development in their spiritual, moral, social, economic and educational life.
- To train and organize groups of youth who are ready to come forward and render voluntary service in times of national distress as well as in community develop-

ment and social welfare pro-

To mobilize the maximum possible resources of the people such as their time, intelligence, energy, land, wealth, specialized skills and technological knowledge which they are prepared to donate of their own free will, and utilize them scientifically to bring about the general economic and social progress of the people.

To associate generally for the realization of the aims of the various institutions of the United Nations and especially to assist in the programs of the Freedom From Hunger Campaign, of FAO, of UNESCO and of WHO to eradicate hunger, illiteracy and disease from our world.

To promote the idea of the need for, and the importance of, the establishment of an International Shramadana Corps, under the auspices of the United Nations, through its member na-

To the people of Sri Lanka the Movement's philosophy is quite intelligible and its programs are quite practicable. The philosophy and the programs only remind them of a potential they possess, strategies they have inherited from time immemorial from simple family-type organizational structures. There is nothing artificial or extraordinarily demanding about it. So the people, irrespective of their age or sex, race or religion, respond to the call of Sarvodaya Shramadana service.

Development is explained as something to do with the awakening man—awakening his or her physical, intellectual, emotional, spiritual, social and economic well-being as an integrated whole. Man is at the center of development—not capital, machines, growth rates or highsounding slogans. All these become meaningful only if man awakens and raises his consciousness about himself, his society and his environment. The first principle in Sarvodaya is the total awakening of the personality of the participant himself.

In Sri Lankan culture, to awaken one's personality one has to develop four qualities, namely,

- 1) Metta: respect for all life—man, beast or plant.
- 2) Karuna: compassionate action to serve others.
- 3) Muditha: deriving joy out of dispassionate service.

4) *Upekkha:* mental equipoise or equanimity.

An inspired and trained leader points out to the community the possibility of translating the above concepts into development action. He can point out that through organized self-help-which is organized compassionate action—many problems facing the community could be solved. This is what the trained Sarvodaya volunteer does in order to get others to volunteer for community service and development programs. Of course once the community is motivated, the rest is a matter of proper organization to decide on a plan of action towards realizable targets, the achievement of which in turn consolidates the faith of the volunteers in the Movement.

How the Program Operates

Villagers wishing to be assisted in the awakening of their village by Sarvodaya are visited by some of the Movement's staff members and together they identify the biggest or most pressing "felt need" of the village that could be met by physical labor. This may be the desilting and restoration of an ancient irrigation tank (water reservoir), the construction of a new tank, the cutting of a new road or the rehabilitation of an existing road, or a similar manual work project. Sarvodaya then helps the village to organize a big Shramadana camp or work-camps in order to tackle this project, using the labor of local villages, reinforced by the villagers from other villages already involved in the Movement, and by Sarvodaya volunteers from towns and cities.

A strict code of self-discipline is followed in these Shramadana camps with six to eight hours of each day devoted to physical work, and three to four hours to education through dialogue, song and dance.

The purpose of these Shramadana camps is to catch the attention of the villagers to demonstrate to them that some of the solutions to their problems lie in their own hands (literally and figuratively), and to prepare the ground for the real process of awakening which begins even while the camp is in progress.

A Shramadana camp where fifty to five hundred persons may camp out and work together in a village development program is in itself an inspiring and motivating experience. Group living on the traditional behavior patterns of sharing (Dana), pleasant language (Priya vachana), constructive activity (Arthacharya), and equality in association (Samanathmatha) is consciously practiced here. Social titles are ignored as participants address one another simply as older or younger brother, older or younger sister.

Three meetings a day—"family" gatherings where all men, women and children participate as equals for meditation, to listen to talks, to sing together and to discuss their problems and programs—ensure common targets being chosen and understood by the whole community for realization through self-help. Grassroots leadership emerges in these camps and from other participatory activities. Official and social leaders from the community itself and the surrounding areas are invited to participate in suitable aspects of the program. In this manner the labor and skills of everybody, irrespective of age or position held, can be mobilized for community service for short periods of time—sufficient time to develop a psychological infrastructure in the community upon which later programs can be built. The most important features of this approach is the motivation of the whole community. At the beginning it may be that few families participate, but later in the same camp or in subsequent camps, Sarvodaya has found no difficulty in any place getting the participation of almost all (if not all) of the people. In this way the Movement has harnessed the energies of several hundred thousand people since its inception.

Beginning during the Shramadana camp, various village organizations a children's group, a young people's group, a women's group and a farmer's group—are created and then steadily developed. These organizations are the basis from which the villagers can discuss with each other—and then, if necessary, with the representative village counciltheir problems, needs and wishes, and together they can take whatever action is required. Very often, they find that by planning and working as a group they can meet village needs which, although simple, have remained unmet for years—for example, rehabilitating village roads and irrigation facilities.

The psychological infrastructure

laid out in the camps is immediately followed by steps to establish a social infrastructure in the village. A few dedicated youths who have a minimum level of required education and who are ready to volunteer for service for a period of time such as two years are next trained in skills necessary to run specific village-level programs, as, for example, pre-school educators, community kitchen workers, village health workers, children's group organizers, general community organizers, agricultural extension workers, or wood/metal workers. Due to limited places available at the Sarvodaya Training Centres, all these youth workers cannot be trained at one time. But once they are trained they return to the village where they become members of a sort of young volunteers team of the village, working in the village with different age groups and as well with the village as a whole in an integrated village re-awakening program. A smooth switch-over of as many young volunteers as possible from a preemployment voluntary service stage to self-employment in the village situation itself is one objective of the Sarvodaya Shramadana Movement.

In trying to link voluntary service with self-employment, it is comparatively easy to create the right psychological background and social organization in the village community where the volunteer serves. But some of the difficulties are 1) the costs of training; 2) the re-activization of the village economy with its numerous economic structures, unrelated to one another in a rational way; 3) landlessness and the administrative difficulties in obtaining even land that is available; 4) the problem of capital; and 5) the marketing problem for surplus. A very close cooperation and understanding between the government and the voluntary agency can help to overcome these problems.

In the village situation sometimes it is not possible to generate selfemployment for all the unemployed youth through the intermediary of a voluntary service period, due to limitations of available village resources such as land. In such cases, the youth's services are extended to places where there are unused land resources that could be developed to generate employment and give a satisfactory income. The services of retired and experienced personnel as. volunteers, with only a small living allowance for pay, are often used by the Sarvodaya Shramadana Movement to guide the youth workers.

Not all Sarvodaya Shramadana programs have been success stories. There have been many failures in the long years of the evolution and development of this Movement. Bad planning, wrong choice of people, insufficient attention paid to coordinating this work with official agencies, and trying to do more than what we were capable of doing would sometimes account for these failings. At the same time, there have been many success stories. Furthermore, Volunteers from India, Bangladesh, Laos, Thailand, Philippines, Indonesia, Canada, Netherlands, West Germany, England, Belgium, Norway, Sweden, Denmark, New Zealand, Australia, Senegal, Japan, etc., have come and worked with Sarvodaya both learning and teaching.

The Volunteers

As has been mentioned already, the Sarvodaya Movement strives to inculcate the attitudes of voluntarism, selfhelp, selfless service and cooperation into communities of people as a whole. Therefore throughout the year Shramadana camps are organized in all parts of the country, especially in villages that come under the Sarvodaya 1000 Villages Development Scheme. According to the time available to them, men, women and children in a particular village, as well as students, officials, and other people from various strata of society outside the village, volunteer for these camps for periods ranging from one day to one week at a stretch.

Individuals volunteer in a variety of ways: for life; for fulltime, two-year service; or for short-term or parttime service. Specialists and foreign volunteers also serve in the Movement. The bulk of the volunteers in the Movement serve for short periods of two days to one month.

With regard to foreign volunteers, three points have to be stressed, namely, the necessity for an understanding of the Sarvodaya philosophy, the integration of the volunteer with the Movement, and the expectations of the volunteer. Most often, foreign volunteers fail to understand that our philosophy is different from theirs not only in the non-violent social order we are striving to build, but also in the means we use to achieve this goal. In other words, the philosophy is closely linked with the lifestyle we practice.

To get settled and work in such an environment where the philosophy is put into practice is a heavy demand on a foreign volunteer. On the other hand, here a shared lifestyle and a new social order can be experienced as western knowledge comes in contact with Asian spirit.

With some exceptions, foreign volunteers have been able to adjust to the Sarvodaya way of life and have been integrated into our 'family.' In fact, some of them on their return have started communities of the type we have in Sarvodaya, in far-off places like Canada and Holland.

The enthusiastic foreign volunteer coming from a rich country should not have a messianic attitude or think he will change the poor world by his efforts. Rather he himself should learn and change and he will soon find that by his change, he has changed others.

The need for people's participation for the development of a predominantly agricultural country like Sri Lanka cannot be overemphasized. I have outlined on these pages the experiences of a non-governmental institution trying in various ways to mobilize people, especially youth, for development. There is no question of the need in the country and the desire on the part of the people to participate in self-development. What is yet lacking is an ideological basis, realistic strategies, and appropriate structural forms about which there is general consensus.

The concept of voluntarism must be integrated with the total development philosophy of the country. It cannot be a mere palliative where youth can idle away time aimlessly until they find a place in the labor market. It must be a purposeful, anxiously awaited, integrated experience for youth to mature into citizenship, responsible adulthood, as they enter the economy of the country. Sooner or later the government and voluntary organizations have to get together to evolve a concept from which, to begin with, the population below the age of 35 could be mobilized. This is a most pressing need for the millions of youths who seek constructive channels to work so as not to be led on the path of destruction.

Control of the Guinea Worm

This issue's Ask ALMANAC is contributed by Bruce Geisert, Program Assistant for the Combatting Childhood Communicable Diseases program, Office of Training and Program Support. Material for the article was drawn from documents supplied by and discussions with Dr. Myron Schultz, International Health Office, Centers for Disease Control (CDC), and Dr. Donald Hopkins, Deputy Director for International Health, CDC.

Guinea worm (le ver de Guinea: la dracunculose) is one of the oldest parasites known to humankind. Since biblical times the guinea worm has been both a cause of human suffering and a serious impediment to economic development in parts of Africa, India and the Middle east.

Despite its prevalence, guinea worm disease has not traditionally been a high priority for research or control, perhaps because the disease is not fatal. Recently, however, governments have begun to realize the enormous loss in productivity—an estimated U.S. \$500 million per yearthat is due to the disease. The cost in human suffering and education lost when students or members of their families are afflicted with the disease is great in countries where the guinea worm is endemic.

Guinea worm disease has been reported in nineteen countries overall, including ten countries where PC Volunteers currently serve (Benin, Burkina Faso, Cameroon, Ghana, Kenya, Mali, Mauritania, Niger, Senegal and Togo). Many of these nations have begun serious efforts to control guinea worm, with the assistance of the U.S. Centers for Disease Control in Atlanta, Georgia.

Control efforts are assisted by several unique characteristics of the disease itself. The parasite enters the body through contaminated drinking water and migrates to a lower extremity, usually the foot. The mature female, which can grow to a meter in length, eventually emerges through an ulcer in the skin. When the wound comes into contact with water, the worm releases eggs, contaminating that water source.

Since guinea worm is transmitted only by infected drinking water, control efforts can focus on a single aspect-protecting water sources. Some of the most effective control

measures are: filtering water through a cloth which removes the parasite's intermediate host (the water flea); building water sources (such as protected step wells) which prevent persons from entering and infecting the water; educating people as to the dangers of contaminating water sources while infected with guinea worm; and treating water with Abate, a chemical which is low in toxicity to humans and commonly used to control onchocerciasis (river blindness).

Control is also easier due to the fact that the disease is seasonal. First, the "incubation" period during which the parasite grows and migrates is one year. The infected person shows no signs of infection until the female worm begins to emerge (the stage in which water sources are contaminated by the eggs).

Secondly, in wetter climates, the intermediate hosts (water fleas) containing the guinea worm larvae tend to sink to the bottom of a pond or step well from where they are most likely to be scooped up during the dry season, when water levels are low.

In semi-arid climates, such as the Sahel, guinea worm is linked to the rainy season when there is a greater amount of standing water. People drawing drinking water from stagnant surface-water sources during the height of the transmission season are exposed to higher rates of infection.

Volunteers in affected countries can assist in control efforts by reporting cases and participating in guinea worm health education activities. If there has been at least one case in a particular area in the last year, guinea worm is endemic, and the risk to other people using the same water source is great. Volunteers who are interested in assisting in the effort to control guinea worm should begin by contacting the person in their country who is working in guinea worm projects. Some of these contacts are listed below.

BENIN Dr. A.J. Codja Coordinateur, OMS B.P. 918 Cotonou, Benin

CAMEROON -

Dr. Peter-Charles Mafiamba Directeur de la Medecine Preventive Ministere de la Sante Publique Yaounde, Cameroon

GHANA

Dr. Y. Aboagye-Atta Director of Medical Services Ministry of Health Accra, Ghana

KENYA N/A

MALI

Professor Philippe Ranque Laboratoire d'Épidemiologie des Affections Parasitaires Ecole Nationale de Medecine et Pharmacie B.P. 1805 Bamako, Mali

MAURITANIA

Dr. Moustapha Sidatt Coordinateur des Programmes de l'OMS B.P. 320 et 465 Nouakchott, Republique Islamique de Mauritanie

NIGER

Dr. I. Alfa Cisse Directeur de l'Hygiene et de la Medecine Mobile Ministere de la Sante Publique et des Affaires Sociales B.P. 371 Niamey, Niger

SENEGAL

Col. Mady Oury Sylla Directeur de la Sante Publique Ministere de la Sante Publique Dakar, Senegal

TOGO

Dr. T. Karsa Chef, Div. De 'Epidemiologie Ministere de la Sante Publique B.P. 336 Lome, Togo

BURKINA FASO

Dr. T.R. Guiguemde Parasitology Section Centre Muraz B.P. 153 Bobo Dioulassa, Burkina Faso

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Networking

FREE!

Three newly updated ICE publications are now available to assist PCVs and their counterparts in acquiring publications for libraries and schools in developing countries.

The first of these, Sources of Books and Periodicals for Schools and Libraries for Peace Corps Volunteers, describes over 25 groups interested in donating free books to overseas institutions. For example, the Darien Book Aid plan has been providing books to PCVs for years. The volunteers at Darien screen a multitude of books on various subjects: biography, science, fiction, and textbooks for elementary and high schools, as well as children's stories and copies of National Geographic and Audubon magazines.

It pays to act quickly in accessing the needs of the school library as it may take several months from the time the actual request is made until final delivery. Delivery is generally easier if the Volunteer who requested the materials is on site when the shipment arrives.

Some groups also provide books in French and Spanish. Be specific about language needs when requesting books to avoid the problem of having a well-stocked library of unreadable materials.

The Free and Reduced Rate Magazine List is designed to help PCVs get access to information during their terms of service. The pamphlet represents generous offers from publishers to provide magazines free or at substantially reduced subscription rates. Some publications have also been listed because they can provide valuable technical information to interested Volunteers.

There are almost 90 magazines listed, ranging in subject matter from the wildlife adventures of Ranger Rick's Nature Magazine to the discussions on Third World development issues and philosophy in Horizons.

Again, the publishers advise ordering early as subscriptions take time to process and those publications sent by surface mail can take from four to eight weeks for delivery.

The last of these resource publications from ICE is our own Peace Corps: A Catalogue of Manuals Reprints Case Studies and Resource Packets. The catalogue is especially designed to provide Peace Corps counterparts and other non-Peace Corps folks with a listing of Peace Corps-generated manuals that they can request for their own development work.

The catalogue lists over 100 titles in nearly twenty technical areas that the ICE staff has selected to support Volunteer work in the field, including such popular titles as Practical Poultry Raising, Agricultural Extension and Accounting for the Micro-Business. Single review copies of up to ten of these titles are available free of charge to those working in development overseas. Host country requestors may write directly for a copy of the Catalogue or Volunteers may make the request on their behalf.

For copies of any of these publications please direct all correspondence

> PEACE CORPS Information Collection and Exchange Room M-701 806 Connecticut Ave., NW Washington, D.C. 20526

Library in a Box

Recently each Peace Corps office received a delivery from PC/Washington—a small box only slightly over one foot by one foot in dimension. Believe it or not, despite its size, this box houses an entire library.

The library, all contained on microfiche, is the brainchild of the group Volunteers in Asia, and consists of the complete texts of over 900 titles on appropriate technology. Volunteers in Asia, publishers of the Appropriate Technology Sourcebook Volumes One and Two selected most of the titles listed in the Sourcebooks plus 125 other titles for inclusion in the microfiche library. The library, hard copies of both volumes of the Sourcebook, and a companion microfiche reader are all included in the handy reference



The selection of materials in the set is based on nearly a decade of research directed towards locating the most practical reference publications in the field of appropriate Technology. Topic areas include renewable energy sources; agricultural tools and techniques; low-cost housing; water supply and sanitation; non-formal education; health care; local community enterprises and many more.

The microfiche cards contain the full texts of such important books as, Where There is No Doctor, Lorena Stoves, The Passive Solar Energy Book and Electric Power From the Wind.

The microfiche reader itself is a high quality machine which is easy to maintain and transport. The directions for use are simple and the machine can accomodate any other microfiche copy one might wish to add

to the collection.

The microfiche reader alone can be a good investment for an organization or library. Many U.S. agencies facing the high cost of printing and shipping have resorted to making their publications available for free only in microfiche. Microfiche copies are often much cheaper than paper copies (as little as \$1.50 for microfiche copy of a 133-page book.)

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!

Volunteers in Asia is offering the AT Microfiche Reference Library and portable microfiche reader for a total of U.S. \$825.00 (\$515.00 without the reader). Airfreight delivery to most cities around the world takes 7 to 14 days and costs an additional \$75.00-\$150.00.

The entire system contains the following items:

The system package

- 1) $1500 \ 4'' \times 6''$ diazzo microfiche reproducing 872 (112,000 + pages of reference materials);
- 2) A portable microfiche file box. with index dividers, to house the microfiche;
- 3) Paper copies of the Appropriate Technology Sourcebook, Volumes One and Two and the Index and Supplementary Reviews, to serve as the indexing documents;
- 4) [Optional] A Cube II dual lens (24×/42× magnification) portable microfiche reader, which can be operated on 110 volts or 240 volts. A separate cord allows for 12-volt operation with a car or motorcycle battery.

For more information contact: Appropriate Technology Project Volunteers in Asia PO Box 4543 Dept. A Stanford, California 94305 U.S.A.

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ICE can also help with materials from the Resource Center which address the guinea worm problem. The following specific titles available from ICE contain brief sections on guinea worm:

- Control of Communicable Diseases in Man describes the clinical aspects of infection and briefly suggests methods for public health control of guinea worm. Available to all PCVs and staff working in related projects.
- Water. Waste and Health in Hot Climates discusses this parasite as one of several water-borne infections. This book is primarily a collection of readings on all aspects of water and sanitation.

Available to PC offices/resource centers incountry only; two copies per country.

- Water and Human Health is also a broad discussion of the many health problems associated with poor water supplies. The section on guinea worm disease includes a very useful bibliography of references on the subject. Available to PC offices/resource centers incountry only; two copies per country.
- Medical Laboratory Manual for Tropical Countries focusses on laboratory detection of guinea worm, but also discusses geographical distribution and symptoms. Available to PCVs and staff working as (or supporting) lab technicians.
- Practical Lab Parasitology provides a brief description of guinea worm as a guide to lab diagnosis. Available to PCVs and staff working as (or supporting) lab technicians.

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. As such ICE provides a means of collecting and sharing the best results of Volunteer programs in the field. Volunteers are encouraged to contribute information to the ICE AL-MANAC or ICE Resource Center. Contributions, requests for technical information or correspondence concerning the ALMANAC should be sent to: ICE, Peace Corps, Rm. M-701, 806 Connecticut Ave., N.W., Washington, D.C. 20526.

Donna S. Frelick, RPCV/The Gambia and Coordinator of ICE, is ICE ALMANAC editor. Special assistance for this issue was provided by David Thomas and the marvelous OTAPS Support Staff.

Sector Updates.

Agriculture

Technical Cooperation Activities: Beekeeping, A Directory and Guide, by Wilhelm Drescher and Eva Crane. 1982 (German Agency for technical Cooperation, Press and PR Unit, Dag-Hammarskold WEG1, D-6263 Eschborn, Germany) 166 pp. \$15.00.

Directory of existing proposals and projects of beekeeping aid programs and a list of aid organizations and agencies. Considers both technical and economic factors and the necessary resources for starting a beekeeping program.

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

AT/Energy

Wind Machines, by Frank R. Eldridge. 1980 (Van Nostrand Reinhold Company, 135 W. 50th Street, New York, N.Y. 10020) 215 pp. \$12.95.

A survey of the present status and future potential of various types of wind machines. Discusses the various possible applications of wind machines; siting problems; performance characteristics; and system design. Written in language easily understood by the layperson, with clear diagrams.

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

Practical Photovoltaics: Electricity from Solar Cells, by Richard J. Komp. 1981 (Aatec Publications, P.O. Box 7119, Ann Arbor, Michigan 48107) 181 pp. \$14.95.

Covers both the theory and technical how-to of assembling and installing solar arrays. Includes section devoted to a general description of solar cells and modules. Technical section details how to use solar cells and offers step-by-step instructions for assembling solar arrays. Also covers some new developments in the photovoltaic industry. Includes helpful diagrams and a glossary of technical terms. Written with U.S. orientation.

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

Education

UNESCO Handbook for Science Teachers, The UNESCO press. 1973 (UNESCO Press, 7 Place de Fontenoy, 75700 Paris) 270 pp. \$14.95.

Addressed to science teachers at the elementary and junior secondary school level. A compilation of ideas contributed by teachers from all over the world. Emphasizes simple scientific activities using locally constructed equipment. May also be useful to teachers supervising science activities. Includes diagrams and scientific tables.

Available free through ICE to PCVs and staff working in science education.

Playgrounds for Free: The Utilization of Used and Surplus Materials, by Paul Hogan. 1974 (The MIT Press, Cambridge, MA 02114) 252 pp. \$9.95.

Tells how to obtain surplus materials and how to build playgrounds out of them. Details construction of specific items. Discusses lessons from past successes and failures. Replete with diagrams and photos. Somewhat U.S.-oriented, but designs are adaptable.

Available free through ICE to PC offices/resources centers incountry only; two copies per country.

Fisheries

Aquaculture Engineering, by Frederick W. Wheaton. 1977 (John Wiley and Sons/Interscience Publications, 605 Third Ave., New York, N.Y. 10158) 708 pp. \$61.45.

Presents the application of engineering principles and procedures to fisheries and to the culture of aquatic organisms. Focusses on the technical problems associated with the production of food and fiber from aquatic resources. Part I covers natural aquatic systems (freshwater, saltwater, and

brackish). Part II covers modified systems, with chapters on water supply; fluid statics and dynamics; water flow and level instrumentation; pumps; ponds, tanks and other structures; filtration; disinfection; and aeration. Includes charts, graphics, and a few photographs.

Available in very limited supply to PC offices/resource centers incountry only.

Tilapia: A Guide to their Biology and Culture in Africa, by John Dominic Balarin assisted by John P. Hatton. 1979 (University of Stirling, Stirling, Scotland) 174 pp. \$12.75

A comprehensive guide to tilapia culture techniques as they apply to feeding, stocking, reproduction control and common tilapia diseases. Explains culture systems and methods of rearing tilapia in Africa, including pond systems and cage and tank cultures. Includes an analysis of common problems and solutions. Contains numerous charts and a bibliography.

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

Forestry

Arboles Comunes de la Provincia de Esmeraldas: Ecuador, by E.L. Little, Jr. and R.G. Dixon. FAO. 1969 (ICE Reprint, 1983) 533 pp. Free.

A tree handbook of two hundred and thirty common and important trees of northwestern Ecuador. Sketches and identifies characteristics such as shape of leaf, bark, flower and seed. Gives the geographic distribution of each species.

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

Guidelines for Watershed Management, FAO. 1977 (Food and Agriculture Organization of the United Nations, Via Delle Terme di Caracalla, 00100 Rome, Italy) 293 pp. \$22.00.

A series of articles on conservation techniques, watershed management and land rehabilitation. Refers to forests, mountain lands and eroded areas. Specifically discusses erosion evaluation, watershed management principles, erosion control methods, land classification, land use planning, slope rehabilitation, land slide problems and environmental impact evaluations.

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

Health

National Council for International Health Directory of U.S. Based Agencies Involved in International Health Assistance, National Council International Health. (NCIH, 2121 Virginia Ave., N.W., Suite 303, Washington, D.C. 20037) 248 pp. \$19.50.

Gives names, addresses and descriptions of activity for organizations involved in international health programs. Organized by categories of health care, assistance—primary health education, nutritional services, and immunization programs—and by regions of assistance, including Africa, Central and South America, the Caribbean, and South East Asia. Contains supplementary material on organizations concerned with oral rehydration therapy and a guide to the U.S. Federal Government agencies that are involved with international health. Also contains a Directory Addendum for 1982.

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

Primary Health Care Issues: Growth Monitoring, American Public Health Association-International Health Programs. 1981 (ICE Reprint, 1983) 79 pp. Free.

Written for the primary health care worker. A guide to monitoring nutritional growth in children and targeting curative and preventive measures for malnutrition. Also covers training of family health workers. Based on research and field experience in developing countries. Includes bibliography and numerous charts.

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

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



GROWTH MONITORING, Primary Health From: Care Issues.

Housing/Construction

Earth Sheltered Housing Design, prepared by the Underground Space Center, University of Minnesota. 1979 (Van Nostrand Reinhold Company Limited, 135 West 50th Street, New York, N.Y. 10020) 318 pp. \$10.95.

Includes descriptions of all considerations in designing an earth sheltered house, including: site planning, architectural and structural design, energy use, and waterproofing and insulating. Replete with photographs and diagrams of various types of existing earth-sheltered houses. Written from a U.S. perspective.

Available free through ICE in limited supply to PC offices/resource centers incountry only.

Appropriate Building Materials, by Roland Stulz. 1981 (ITDG-Milton Buschoff, C/O P.O. Box 337, Crotonon-Hudson, N.Y. 10520) 324 pp. \$13.50.

Provides general information on the use of traditional and experimental building materials, such as timber, bamboo, natural fibers, concrete and cement. Includes specific examples, illustrations and charts. Meant for use when building one-story, low-cost buildings.

Resources

Free and Reduced Rate Magazine List, compiled by Information Collection and Exchange. 1983 (Peace Corps, Information Collection and Exchange, 806 Connecticut Avenue, N.W., Washington, D.C. 20526) 21 pp. Free.

Provides Peace Corps Volunteers access to information on a wide variety of periodicals which can be of use during Peace Corps Service. Magazines are offered at reduced prices or for free. Also includes some publications that are not available at a reduced rate, but can provide valuable technical information.

Available free through ICE to all PCVs and staff.

SED

Cottage Industries and Handicrafts, by M. Allal and E. Chuta. 1982 (International Labor Office, CH-1211, Geneva 22, Switzerland) 201 pp. \$11.40. Focusses on small-scale traditional activities and how policymakers, planners, program designers and handicraft institutions can assist in adapting these to current markets. Describes the contribution to employment and development by cottage industries. Discusses methods of formulating, implementing, and evaluating employment promotion programs through the use of statistical tables and also sample questionnaires.

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

Cooperative Organization: An Introduction, by B.A. Youngjohns. 1979 (Intermediate Technology Publications, Ltd., 9 King Street, London WC2E 8HN, United Kingdom) 34 pp. \$2.50.

Provides a general overview of what cooperatives are, how they are organized, what they can do and how they relate to other types of organizations. Briefly discusses specific types of cooperatives, eg: credit unions, joint farming, housing and fisheries. Also briefly discusses common problems encountered in setting up and running cooperatives in developing countries.

Available free through ICE to all PCVs and staff working with cooperatives.

Special Education

Mainstreaming Preschoolers: Children with Learning Disabilities, by A.H. Hayden, R.K. Smith, C.S. von Hippel and S.A. Baer. 1980 (Superintendant of Documents, U.S. Government Printing Office, Washington, D.C. 20402) 127 pp. \$6.50.

Written for anyone who works with learning-disabled preschoolers. Includes discussions of what learning disabilities are, how they affect learning in three to five-year-olds, mainstreaming, skills for parents working with teachers, and resources for further help. Includes a listing of various organizations involved in teaching learning-disabled children. Contains sample observational charts and a "normal development" chart.

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

Mainstreaming Preschoolers: Children with Hearing Impairments, by R.A. Laporta, D.I. McGee, A. Simmons-Martin, E. Vorce, C.S. von Hippel and J. Donovan. 1980 (Superintendant of Documents, U.S. Govintendant)

ernment Printing Office, Washington, D.C. 20402) 131 pp. \$6.50.

Written for all individuals involved in teaching hearing-impaired children. Includes common definitions of hearing impairment, general guidelines for teaching hearing-impaired children, and a listing of how to find helpful resources. Also includes a listing of organizations involved in teaching hearing-impaired children.

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

Mainstreaming Preschoolers: Children with Mental Retardation, by E. Lynch, B.H. Simms, C.S. Simms, C.S. von Hippel and J. Shuchat. 1978 (Superintendant of Documents, U.S. Government Printing Office, Washington, D.C. 20402) 139 pp. \$6.50. Designed for individuals involved in teaching mentally retarded children. Includes discussions of individual programs and special activities for mentally retarded children. Discusses ways in which parents can be helpful to their mentally retarded child. Includes a list of organizations involved in special education and an annotated bibliography.

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

Water Sanitation

Shallow Wells. 1979 (DHV Consulting Engineers, P.O. Box 85, Amersfoort, The Netherlands) 189 pp. \$8.75.

Discusses all phases of a well construction project, including: selecting the site, constructing the well, designing a hand pump, and maintenance of the pump and well. Details the logistics, administration and costs of such a project. Replete with diagrams and photographs.

Available free through ICE to all PCVs and staff working in water sanitation.

Village Water Supply: Economics and Policy in the Developing World, by Robert Saunders and Jeremy Warford. 1976 (The World Bank, 1818 H Street, N.W., Washington, D.C. 20433) 279 pp. \$21.00.

Approaches water supply and sanitation problems from an economic point of view, stressing economic effects of programs, measurements of health improvements, pricing policies for water services, planning and administration of large-scale water supply projects. Most useful to program planners and evaluators.

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

WID

Looking to the Future. 1983 (Humphrey Institute of Public Affairs, University of Minnesota, 909 Social Sciences, 267 19th Avenue S. Minneapolis, MN. 55455) 45 pp. \$5.00.

Written to show that women in nongovernmental organizations have been able to interact with governments to produce change in the status of women and to promote peace and international understanding. Describes the events leading up to, and including, the United Nations conferences during the Decade for Women (1975–1985). Includes condensed versions of many of the documents presented during the conferences.

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

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 incountry funds. PCVs should contact their incountry staff regarding assistance in making these work-related purchases.