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WASH Field Report No. 369

**FINAL EVALUATION OF THE
PEACE CORPS GUINEA WORM
ERADICATION PROGRAM**

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by

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ABOUT THE AUTHOR

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ACRONYMS

AFSI	African Food Systems Initiative
A.I.D.	Agency for International Development (USAID)
APCD	Associate Peace Corps Director
CAR	Central African Republic
CDC	Centers for Disease Control
CS	Child survival
CHW	Community Health Worker
EC	European Community
DORN	Dracunculiasis Operations Research Network, Burkina Faso
DRASS	<i>Directeur régional de l'action sociale et sanitaire</i> (Regional Director of Social and Health Activities, Mauritania)
GW	Guinea Worm
GWD	Guinea Worm Disease
GWE	Guinea Worm Eradication
GWE/PCV	Peace Corps Volunteer having GWE as a primary task
GWEP	Guinea Worm Eradication Program
HCN	Host Country National
HIS	Health Information System
IPBS	Integrated Planning and Budget System (Peace Corps)
IST	In-service Training (Peace Corps)
JICA	Japanese International Cooperation Agency
LGA	Local Government Area (Nigeria)
MSCI	Medical Service Corporation International
MOH	Ministry of Health
MPH	Master's in Public Health
NCID	National Center for Infectious Diseases (CDC)

NIGEP	Nigeria Guinea Worm Eradication Program
NYC	National Youth Corps (Nigeria)
OCEAC	<i>Organisation de coordination pour la lutte contre les endémies en Afrique Centrale</i> (Coordinating Organization for the Fight Against Epidemics in Central Africa)
OCCGE	<i>Organisation de coordination et de coopération pour la lutte contre les grandes endémies</i> (Organization for Coordination of the Control of Epidemic Diseases in Central Africa)
OTAPS	Office of Training and Program Support (Peace Corps)
PATS	Programming and Training System Manual (Peace Corps)
PASA	Participating Agencies Service Agreement (a funding instrument for A.I.D.)
PC	Peace Corps
PCV	Peace Corps Volunteer
PC/W	Peace Corps/Washington
PPC	Office of Policy and Program Coordination (A.I.D.)
PST	Pre-service Training (Peace Corps)
R&D/H/CD	A.I.D. Bureau of Research and Development, Office of Health, Department of Communicable Diseases (replaced S&T/H/CD in January 1992)
S&T/H/CD	A.I.D. Bureau of Science and Technology, Office of Health, Department of Communicable Diseases (prior to 1992)
SPA	Small Projects Assistance Program (A.I.D.)
TOT	Training of Trainers (Peace Corps)
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development (overseas mission)
VBC	Vector Biology and Control Project
VBHW	Village-based Health Worker (Nigeria)
VHV	Village Health Volunteer (usually in reference to Global 2000 GWE program)

WASH	Water and Sanitation for Health Project
W/S	Water and Sanitation Sector
W/S, OTAPS	Water and Sanitation Section, Office of Training and Program Support (Peace Corps)
WHO	World Health Organization

EXECUTIVE SUMMARY

The goal of the Peace Corps Guinea Worm Eradication Program (PC/GWEP) may be summarized as follows:

To provide knowledge, technical assistance, and support to Peace Corps Volunteers engaged in a campaign with the governments of up to 10 African countries to significantly reduce or eradicate Guinea worm disease.

From the outset the program had two objectives. The first was to put the Peace Corps' unique person-to-person approach at the service of national Guinea worm eradication programs in Africa. The program offered the promise of an ideal Peace Corps project, requiring little technical expertise and showing a visible impact on the incidence of the disease in the course of one annual transmission cycle. The second objective was to extend the PC/GWEP beyond the limits of a special-purpose program to focus on training in program planning generally, thereby enhancing the capacity of the Peace Corps and its partners to plan, manage, monitor, and evaluate future activities.

The actions in support of these objectives were to:

- provide technical support to increase Peace Corps programming skills in GWE;
- develop and disseminate information to promote GWE efforts;
- train Peace Corps Volunteers (PCVs) and their counterparts to implement anticipated features of national plans and the PC/GWEP;
- promote regular collaboration at global, national, and local levels to advance GWE;
- strengthen GWE project monitoring and evaluation to improve the management of the PC/GWEP.

Principal collaborators in the PC/GWEP grant from A.I.D. were the Peace Corps, the A.I.D.-funded WASH Project, and the CDC National Center for Infectious Diseases, which serves as the World Health Organization's (WHO) partner in Guinea worm eradication. Among the subsidiary collaborators were African governments, USAID missions, CDC, Global 2000, UNICEF, WHO, and numerous other agencies, organizations, and private entities.

The Peace Corps has played a dual role as an advocate for the program before the donor community and as a grassroots mobilizer among the beneficiaries. It seeks to continue its participation in the global attack on Guinea worm disease through 1995. Consequently, the threefold purpose of this evaluation emphasizing future planning is: (1) to review how effectively the Peace Corps has met its program objectives; (2) to propose recommendations for improving future Peace Corps activities in GWE; and (3) to capture lessons learned during the program.

Information about the program was gathered by several methods, including two survey questionnaires completed by Peace Corps staff and volunteers, interviews and observational field visits in Benin, Ghana, Nigeria, and Mauritania, and focus group discussions with staff and volunteers.

The PC/GWEP combines strategies from the health, sanitation, and water supply sectors which it approaches through programming (planning, monitoring, and evaluation), training, collaboration, and research. It functions in the national context, respecting each country's priorities.

Originally designed for 10 countries, the program now includes 11: Benin, Cameroon, Central African Republic, Côte d'Ivoire, Chad, Ghana, Mali, Mauritania, Niger, Nigeria, and Togo. Seventy-four volunteers currently are active in it, and over one-half combine Guinea worm eradication with complementary tasks in general health education, water supply, and community development.

Findings from this evaluation indicate that, overall, the program has met its objectives. The level of outputs achieved was high, and efforts in the field were especially notable. Moreover, where local surveillance data are available, a tentative correlation is permissible between a decline in the incidence of the disease and the efforts of PCVs in the area. Some weaknesses in program planning, management, and design, now in the process of being corrected, were offset by expectations exceeded elsewhere.

Most important, however, is clear evidence of a growing momentum in participating countries and their respective Peace Corps posts as the eradication target date of 1995 draws near. Every post engaged in the program has expressed the conviction that Guinea worm eradication activities should continue. Given the limited core funding available within the Peace Corps for water and sanitation activities, an extension of financial and technical support will be required to consolidate and sustain present gains and to permit the planned increase in volunteer effort.

The chief recommendations for a future program are the following:

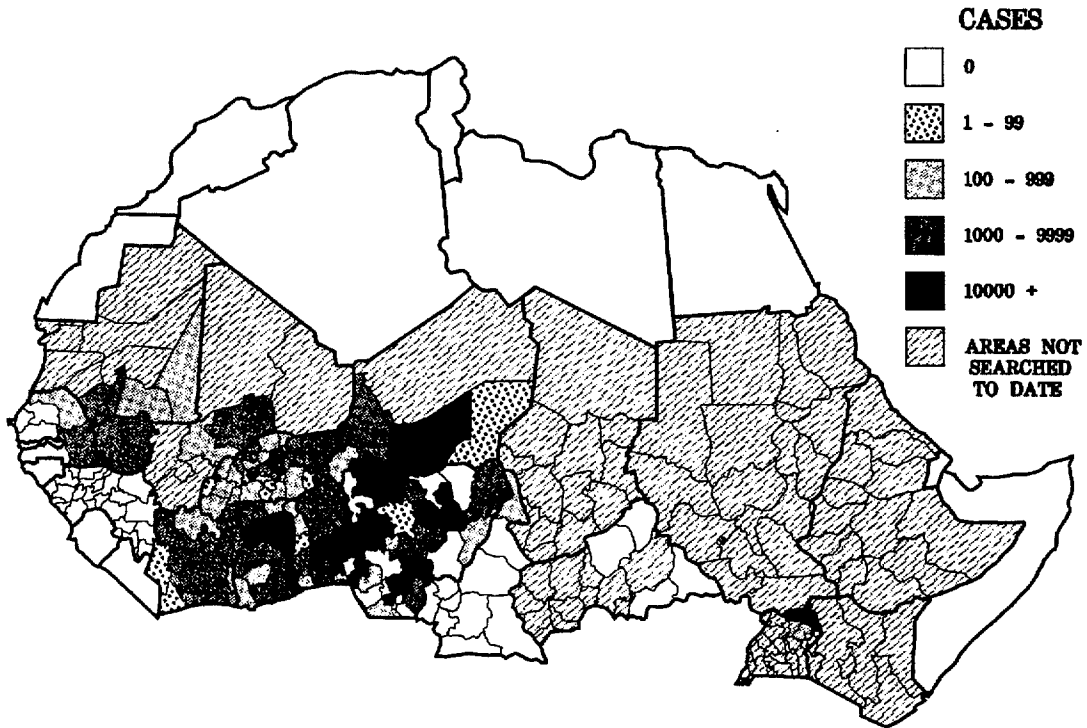
1. As the office responsible for PC/GWEP, W/S OTAPS should increase its support for the growing number of field posts now participating in the program. Specifically, the office should
 - create a GWEP quarterly monitoring system for all field posts concerned;
 - deploy staff or consultants to lend programming support to individual posts, employing country-specific strategies where necessary;
 - assign a full-time program assistant to the management of PC/GWEP;

- improve program communication by naming a field-level Guinea worm eradication focal point (designated point person) in each post and defining specific tasks for them.
2. The maximum use should be made of volunteer effort by
 - integrating GWE-related tasks such as water supply and general health education;
 - training all volunteers in endemic areas in Guinea worm eradication;
 - continuing to recruit volunteers with knowledge of Guinea worm disease.
 3. Funding support should be continued through 1995, the target date for eradication.

Of the lessons learned from the PC/GWEP, two stand out. One is that the community-based, person-to-person approach to health education can be effective in encouraging health-seeking behavior. The other is that, in the view of many persons active in GWE throughout the decade, the entry of the Peace Corps into the campaign was a watershed and the beginning of a global mobilization effort.

MAP

NUMBER OF REPORTED CASES OF DRACUNCULIASIS IN AFRICA 1990-1991



Source: WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis at the Centers for Disease Control, Atlanta, GA, for preparation of this map.

Chapter 1

INTRODUCTION

1.1 Purpose of the Evaluation

In June 1989, the Africa Bureau of the United States Agency for International Development (USAID) authorized a three-year grant for a Guinea Worm Eradication Program (GWEP) to be initiated and implemented by Peace Corps staff and volunteers as part of a global effort to eradicate¹ Guinea worm disease in sub-Saharan Africa by the target date of 1995. Partners in the effort include African governments, USAID missions, Centers for Disease Control (CDC), Global 2000, UNICEF, World Health Organization (WHO), as well as numerous other agencies, organizations, and private entities. The GWE grant set two precedents. It was the first Participating Agencies Service Agreement (PASA) to support the Peace Corps in a regional program having a specified goal and a measurable outcome. It offered an opportunity to test the efficacy of the Peace Corps' unique, person-to-person approach to implementation and health education in the context of a global initiative seeking elimination of a debilitating disease.

Since the Peace Corps seeks to continue its participation in the global GWE effort through 1995, this program evaluation, scheduled for the end of the first three years, will emphasize future planning. Its purpose as set out in the scope of work is: (1) to review how effectively the Peace Corps has met its program objectives; (2) to capture lessons learned during the program period; and (3) to propose recommendations for improving future Peace Corps activities in GWE (see Appendix A). As a corollary, the evaluation will also consider the contribution of the Peace Corps program toward assisting the global effort to achieve significant reductions in Guinea worm infestations in selected African countries where Guinea worm is endemic.

The report is organized in seven chapters that follow this introduction: the background to the Peace Corps GWE Program and the evolution of global GWE policy (Chapter 2); a summary of the main features of the Peace Corps program and the PC role in GWE (Chapter 3); an assessment of the Peace Corps GWE program objectives—in planning, research, information, collaboration, training, management, and administration—and of relevant inputs, processes, and outputs within the program context (Chapter 4); a country-by-country analysis of program achievements and constraints (Chapter 5); a description of the financial administration of the program (Chapter 6); general recommendations for the design of future GWE activities by Peace Corps staff and volunteers (Chapter 7); and the lessons learned (Chapter 8).

¹Throughout this report “eradication” is used interchangeably with “elimination.” In strict usage, the first refers to global elimination of a disease, while the second to the extinction of all cases within a designated region or country.

1.2 Team Members

The Peace Corps Guinea Worm Eradication Program (PC/GWEP) conducts its work in 11 countries and at its Washington office (PC/W). Consequently, the evaluation sought to elicit a range of views and opinions offered by field and headquarters staff (e.g., Peace Corps Directors, Associate Directors [APCDs], and Peace Corps Volunteers [PCVs] in PC/GWEP countries). In a very real sense these individuals served as front-line evaluators by analyzing their respective country programs and then sharing the results through interviews, written communications, and questionnaires.

Members of the team that collected and analyzed the data were:

Dr. Deirdre LaPin, Evaluation Consultant, WASH Project, Chief Evaluator

Dr. Joy Barrett, Water and Sanitation Specialist, Peace Corps-OTAPS

Dr. Helga Rippen, AAAS Fellow, R&D/ H/CD, USAID.

1.3 Methodology

The team relied on the following methods to collect and assess program-related information:

- Examination of relevant program documents, including concept papers, official correspondence, country-level reviews, newsletters, technical reports, national GWE plans, Special Project Agreements (SPAs), and financial reports (see Appendix B)
- Holding individual interviews and focus group discussions with PC/GWEP personnel at headquarters and at the third annual Guinea worm eradication workshop held in Nouakchott, Mauritania, May 2-6, 1992 (see Appendix C)
- Preparation and analysis of a questionnaire on implementation issues sent to all PCVs engaged in Guinea worm activities in GWEP countries (see Appendix D)
- Preparation and analysis of a comprehensive questionnaire on program objectives sent to PC Country Directors or APCDs charged with country-level GWEP management (see Appendix E)
- Field visits to Benin, Ghana, Mauritania, and Nigeria (see Appendix F)
- Development of two in-depth case studies on PC/GWE activities in Benin and Ghana (see Appendices G and H)
- Interviewing program personnel (PC Directors, APCDs, PCVs, government officials and counterparts) using a prepared question schedule at field sites listed above.

Information obtained from these sources sufficed to indicate program progress and trends. Samples of field observations in Benin, Ghana, Mauritania, and Nigeria and interviews in the field and at the workshop in Nouakchott were selected according to convenience rather than by random sampling. Despite this logistical constraint, an effort was made to gain a

representative assessment of PC experience in each GWEP country. The APCD and PCV questionnaires received an excellent response. Gaps were filled in through discussions in Nouakchott.

Chapter 2

BACKGROUND

2.1 Guinea Worm Disease

It is estimated that about five million persons are afflicted with Guinea worm disease each year, the vast majority in the 17 sub-Saharan African countries where the parasite is still endemic. About 140 million persons are at risk of infection.

Guinea worm disease (Dracunculiasis, GWD) is a disabling condition caused by the parasite *Dracunculus medinensis*. Infection occurs when a person drinks water containing water fleas (cyclopoid copepods) that have consumed the parasite larvae. The larvae lodge in human connective tissue and take a year to mature. When an adult female is ready to emerge, she travels to the skin surface—most often in the lower limb—and causes a painful, ulcerating blister. The worm, usually about 70 to 100 cm in length, is stimulated by contact with water to protrude through the wound, expelling thousands of larvae and starting the transmission cycle again. Treatment includes winding on a stick the small portion of the worm that becomes visible each day. In some localities the ulcer is also soothed with water, ointments, or oils. No effective drugs or vaccines are known.

GWD is often given low priority among vector-borne diseases in Africa, where malaria, schistosomiasis, trypanosomiasis, and others are common, but it poses serious health and economic threats to the individual and community. The victim may be away from work or school for weeks and sometimes months. Simple routine tasks such as marketing, herding, trading, cultivation, or fetching water and firewood are severely curtailed. School attendance suffers. Estimates of annual lost productivity in Africa range between \$300 million and \$1 trillion.

Because there are no drugs or vaccines to combat the disease, preventing transmission is the best means of elimination and control. Preventive measures include: educating the community about the risks of allowing infected persons to enter sources of drinking water, such as open wells or ponds; building walls or other barriers around water sources to prevent entry; filtering drinking water through a nylon filament or something similar; providing safe sources of water supply, such as capped wells or catchments with pumps; and using temephos for chemical control.

2.2 The Eradication Effort

In 1986 and again in 1989, WHO called for the eradication of GWD and in 1991 set a target date of 1995. Several features make the disease an ideal candidate for eradication. Transmission occurs only through drinking contaminated water; humans are the sole hosts; and the adult worm lives no longer than one year, limiting the period during which transmission is possible.

During the 1980s, a number of projects to control or eliminate GWD were designed for endemic countries in Africa. At the outset they were piecemeal efforts. Regional coordination and exchange were encouraged by the first African regional conference on dracunculiasis organized by WHO in 1984. Since 1988, these regional conferences have been held biennially. Nearly all endemic countries in Africa now have GWE plans or are in the course of developing them, and nearly two dozen donors are currently assisting in the GWE effort.

2.3 Peace Corps Advocacy for GWE: A Watershed

Following the second regional conference in 1988, the Peace Corps voiced strong interest in assisting GWE efforts in Africa. Other institutions such as the Carter Center and the WHO Collaborating Center for Guinea Worm Disease at the Centers for Disease Control (CDC) judged GWE activities well suited to the Peace Corps' community-based, "person-to-person" approach to development.

The behavioral focus in GWD control, combined with the experience of PC in the smallpox eradication campaigns of the 1960s and 1970s, suggested that Peace Corps Volunteers (PCVs) were uniquely positioned to strengthen the vital link between national GWE strategies and the individual communities they were intended to serve. Meanwhile, the U.S. Congress began hearings on the negative effects of GWD on development in Africa, and the Peace Corps seized this opportunity to intervene in furthering international public health policy. It requested supplementary funds to join eradication efforts in at least 10 African countries in which the disease was endemic.

Many GWE donors in Africa welcomed the involvement of PCVs as a community-level extension of their own effort. From the standpoint of the Peace Corps, the PC/GWEP represented an ideal activity for the volunteer. The preventive measures required simple technologies that could be easily applied following a brief period of training. The activity encouraged volunteer interaction with individuals and structures within the community. In theory, the disease could be eliminated after a single transmission season, and evidence of success would be apparent one year thereafter. Within the normal two-year span of service, a PCV would see the results of a job well done and the promise of a better life for the community served.

In June 1989, A.I.D. awarded a three-year grant to support the Peace Corps Guinea Worm Eradication Program (PC/GWEP). For the first time in its history, the Peace Corps would embark on a development activity that would require it to assume two divergent roles: policy advocate before the donor community and grassroots mobilizer among the beneficiaries. In the view of many persons active in GWE throughout the decade, the entry of the Peace Corps was a significant watershed. The event spurred global awareness of the disability caused by the disease and its blight on the future well-being and productivity of sub-Saharan Africa. Moreover, the support of additional donor agencies in the GWE struggle was undoubtedly stimulated by the promise of "person-to-person" health education in endemic communities by participating PCVs.

2.4 Components of Guinea Worm Eradication Programs and the PC Role

In principle, any country-based PC/GWEP would be conceived and executed in the context of a national GWE plan of action. By the close of the 1980s, the WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis at CDC had published a set of guidelines for developing these plans that included an initial assessment of the problem, collecting related information, analyzing results, creating a national committee or task force, naming a national coordinator, formulating a provisional plan of action, conducting a national case search, fleshing out the plan, establishing methods of disease control and surveillance, and creating systems of monitoring and evaluation. In addition, specific guidelines for surveillance, health education and community mobilization, and chemical control of the copepod hosts were also formulated. The criterion for certifying the total elimination of GWD from a locality was a three-year period without the occurrence of new cases. The use of cloth filters to exclude copepods from drinking water, was strongly encouraged.

At country level, PCV support could be enlisted for any part of this GWE program depending on competence, willingness, job description, and the general program of the country Peace Corps post. From the outset, it was expected that a number of volunteers would devote themselves full-time to the GWE effort. Others would take on GWE as a secondary or tertiary assignment. Given the seasonal nature of GW transmission, many PCVs working on health, rural development, or education in endemic areas found GWE a satisfying secondary activity. Full-time involvement best suited PCVs with technical, planning, or management roles in national or project-based GWE structures.

Commonly all volunteers having GWE as their primary job (GWE/PCV) engage in GWE health education. To this core activity they may add surveillance, small water projects, distribution of cloth filters, GWE planning, creation of health education materials, and participation in national case searches. Other PCVs who do GWE secondarily may also select any mix of activities from this list, depending on interest, local need, or the requirements of a program of which they are part.

2.5 Structures for Collaboration

2.5.1 Main Contributors

The last half of the 1980s and the early 1990s saw a growing number of external agencies committed to GWE. Chief among these—apart from the Peace Corps—were CARE, CDC, Global 2000, Japan International Cooperation Agency (JICA), *Organisation de coordination et de coopération pour la lutte contre les grandes endémies* (Organization for Coordination and Cooperation in the Control of Epidemic Diseases, OCCGE), WHO, World Neighbors, the World Bank, World Vision, UNICEF, UNDP, and A.I.D. Their contributions ranged from global planning and policy-making (e.g., WHO/CDC) to national-level programming (e.g., Global 2000, UNICEF, and A.I.D.), financing (e.g., UNDP), and specific-purpose action (e.g., World Neighbors flipcharts, JICA water supply projects).

In-kind contributions from the private sector were equally significant. American Cyanamide Corporation provided temephos (Abate) for the elimination of cyclops in drinking water, and DuPont/Nemours Corporation supplied monofilament nylon cloth for the fabrication of drinking water filters.

Over the course of the program, the Peace Corps' most important collaborators would be Global 2000 and UNICEF. The former established major interventions in Ghana and Nigeria and provided planning support to Benin and Togo. UNICEF launched a major institutional initiative at the end of the 1980s, leading to the creation of an operations guide for GWE and development of an integrated health information system relying on regular surveillance and mapping. For this last effort, GWE would serve as an entry point. Meanwhile, UNICEF programming in GW endemic countries emphasized GWE. Early in the life of the PC/GWEP, the Peace Corps proposed a "Memorandum of Cooperation" between the two organizations. Though one was never signed, fruitful cooperation ensued, especially at the field level.

2.5.2 Collaboration

The variety and geographical scope of GWE interventions prompted the creation of several structures for international collaboration and exchange, in addition to the WHO biennial regional conferences mentioned earlier. The Interagency Coordinating Group for Dracunculiasis Eradication held its first quarterly meeting in 1988 and has since assembled participants from WHO/CDC, Global 2000, the World Bank, USAID, the A.I.D.-funded Water and Sanitation for Health Project (WASH), Vector Biology and Control Project (VBC), and, more recently, the World Bank. An interagency Guinea Worm Information Center has been created with A.I.D. funding to disseminate publications and reports on GWE. In 1991, CDC/WHO, UNICEF, A.I.D., and the London School of Hygiene and Tropical Medicine set up a dracunculiasis operations research network (DORN) in Burkina Faso to support local researchers and public health practitioners from Guinea worm endemic countries.

Apart from these permanent structures, there are occasional events to mobilize GWE support. Recent examples are the "1992 GWE Summit" arranged by Global 2000 at the Carter Presidential Center, and the promotion by OCCGE of a "Guinea Worm Eradication Day" in some francophone African countries.

Several periodicals devoted to GWE have appeared. Most prominent are the quarterly "Guinea Worm Wrap-Up," published by CDC, and "As the Worm Turns," a regular Peace Corps production. Global 2000 distributes a weekly faxed newsletter to interested individuals and institutions.

Tulane University has developed a promising program, known as the Master's Internationalist Program, in collaboration with the Peace Corps. Students enrolled for a master's degree in public health add GWE training in anticipation of joining PC/GWEP. At present, six students have been or will be placed in GW endemic countries, to assume planning or management roles.

Chapter 3

THE PEACE CORPS GUINEA WORM ERADICATION PROGRAM: A BRIEF DESCRIPTION

3.1 Program Goal

The goal of the Peace Corps Guinea Worm Eradication Program (PC/GWEP), expressed in several documents, can be summarized as follows:

To provide knowledge, technical assistance, and support to Peace Corps Volunteers engaged in a campaign with the governments of up to 10 African countries to significantly reduce or eradicate Guinea worm disease.

3.2 Program Objectives and Activities

The principal intentions from the outset were to channel GWE health education and other activities through the Peace Corps' person-to-person approach, to use the program as an opportunity to enhance Peace Corps programming skills at both the central and field levels, and to provide a meaningful work experience for volunteers.

The specific objectives of the program and their related activities are described below:

1. To provide technical support to improve Peace Corps programming skills in GWE (and, by implication, in other PC programs):
 - hold three annual regional workshops on programming elements and skills for Peace Corps staff, volunteers, and key counterparts in GWE
 - develop model programming materials for use at the country level
 - conduct disease surveillance and operational research, if possible with PCV assistance, and publish results as technical reports
 - furnish consultants or other technical assistance for PC/GWEP design to three PC country posts each year
2. To develop and disseminate information to promote GWE efforts:
 - organize a GWE information network through the WASH Project
 - distribute "Guinea Worm Wrap-Up" and "As the Worm Turns" to staff, PCVs, and counterparts
 - utilize annual workshops as a forum for information exchange
 - designate a GWE information coordinator at each country post

- encourage sharing of GWE experiences among countries
3. To train PCVs and their counterparts to implement GWE activities foreseen in national GWE and PC/GWEP plans:
 - develop pre-packaged GWE training modules for PCV pre-service training (PST)
 - develop 5-day GWE training modules for in-country use
 - hold 10 GWE workshops for PCVs in each country over the life of the project
 - organize in-service training programs (ISTs) to train a total of 240 PCVs and counterparts
 - introduce a training element in each of the three annual GWE workshops
 - create locally adaptable training materials for country-level training events and workshops
 4. To promote regular collaboration at global, national, and local levels to strengthen GWE:
 - conduct semi-annual program planning meetings with PC/GWEP participant institutions (PC, WASH, VBC, CDC, etc.)
 - contribute to the WHO biennial regional conferences
 - attend quarterly meetings of the Interagency Coordinating Group on Dracunculiasis
 - encourage the coordinated development of health and water and sanitation to favor GWE
 - coordinate annual Peace Corps GWE workshops with WHO regional conferences in the years when they occur
 5. To improve PC/GWEP management by strengthening GWE project monitoring and evaluation (M&E) skills:
 - coordinate program monitoring with disease surveillance
 - determine annual monitoring and final evaluation indicators for each country-level plan
 - develop appropriate M&E instruments for each country
 - share surveillance and M&E information with collaborators

3.3 Program Inputs

3.3.1 Technical Assistance

The PC/GWEP draws on the expertise of three institutions: CDC, the WASH Project, and the Peace Corps itself. CDC contributes consultants, whose travel and per diem are paid by the program. WASH furnishes a broad range of services, including technical guidance in program planning, training, and evaluation. The Peace Corps provides the expertise of its specialists in Washington and its staff in the field. In addition, the VBC Project supports PC/GWEP-related activities by offering consultants for country-level PC/GWEP planning, a training manual, and workshop facilitation.

3.3.2 Peace Corps Personnel

3.3.2.1 Peace Corps/Washington (PC/W)

The Water and Sanitation Section of the Peace Corps' Office of Training and Program Support (W/S, OTAPS) serves as the central office for the PC/GWEP and the W/S specialist who heads the office is the program's responsible officer. An assistant to the W/S specialist is funded by the PC/GWEP. In addition, OTAPS specialists in public health provide key support to the project.

3.3.2.2 Peace Corps Country Posts

Program management in the Peace Corps is decentralized, with each post setting its own development priorities according to the country's needs and plans. From the outset, it was proposed that 10 volunteers per country would take on GWE as a primary responsibility. Volunteers were not required to have technical skills, but those with master's degrees in public health were preferred. In each office an Associate Peace Corps Director (APCD) responsible for health, W/S, or rural development would lend planning, supervisory, and technical support to GWE/PCVs.

3.3.3 Participating Countries

Up to 10 countries were expected to enter the program between 1990 and early 1992, with others joining later if the program was extended. Participating countries would enter by mutual agreement between Peace Corps posts and the respective host governments.

PC/GWEP planning meetings in August and September 1989 proposed that up to four countries would enter the program in the first year. Ghana, Togo, and Cameroon, where the Peace Corps was already supporting GWE activities, would be included, and Cameroon, where GWE had advanced well since 1986, would serve as a pilot project.

The potential participants were Benin, Cameroon, Central African Republic (CAR), Chad, The Gambia, Ghana, Guinea, Kenya, Mali, Mauritania, Niger, Senegal, and Togo.

The actual participants, shown under the year in which they entered the program, are:

1990	1991	1992	<i>in progress</i>
Benin	CAR	Niger	Chad
Cameroon	Mauritania		Côte d'Ivoire
Ghana	Nigeria		
Togo	Mali		

3.3.4 Funding

Initial A.I.D. funds for the PC/GWEP (in \$000) were distributed as follows:

Peace Corps	441.0
WASH Project (for technical support to PC)	150.0
CDC/NCID support to PC	<u>20.0</u>
TOTAL	611.0

Subsequently, R&D/H/CD provided \$75,000 to WASH and \$200,000 for distribution to Peace Corps posts in country packets of \$20,000 each to support small-scale projects initiated by PCVs and their communities. These additional grants brought the total funding for the program to \$886,000.

3.3.5 Materials

The program anticipated the contribution of adequate quantities of temephos (Abate) and cloth filter material.

3.4 Proposed Calendar of Activities

No formal workplan was developed, but the following activities were agreed upon:

Year 1	Year 2	Year 3
Start-up Workshop 4 countries enter WHO Regional Conf. Complete planning	Surveillance Workshop 3 more countries	M&E Workshop 3 more countries WHO Regional Conf. Final evaluation

3.5 Expected Outputs

The anticipated outputs of the PC/GWEP would follow from its specific objectives and their related activities. Two major outputs were expected: those from building the programming capacity of PC and PCVs, and those from GWE activities and capacity building in endemic areas. Outputs from PC capacity building (e.g., PC/GWEP plans, PCVs trained in GWE methods) would become inputs for country-level action. Specific end-of-program indicators would be numerical values of the following outputs:

- PC posts
- outside funders
- full-time PCVs
- part-time PCVs
- communities
- schools/students
- improved water sources
- organizations trained
- cloth filters distributed
- households using filters correctly
- villages eliminating Guinea worm disease
- reduction in incidence
- operational research studies
- cases coming for treatment
- village health workers trained in GWE
- unanticipated effects of the program

3.6 Expected Outcome (Impact)

The most important outcome of the PC/GWEP would be an affirmative answer to the question, "Has the village-based approach to GW health education indeed led to fewer new cases of the disease?" Such an answer would require rarely available baseline surveillance data from all PC/GWEP countries prior to 1990, when the program began. Even were such data available, measurement of program impact would have to isolate the contribution of the Peace Corps from that of many other participants in GWE, a virtually impossible and not very useful exercise. One could show, however, that countries in which PCVs are working to eradicate GW show a higher rate in the reduction of the disease.

An intermediate indicator of impact would be the number of persons who received health education and other program benefits. In early planning documents this number was roughly calculated as follows:

each PCV supporting 15 villages of 300 inhabitants each would reach	4,500 persons a year
10 PCVs engaged in GWE in each country would reach	45,000 persons a year
PCVs in 10 countries would reach	450,000 persons a year
in 3 years the program would reach	1,350,000 persons

Given the plan for the staggered entry of countries into the PC/GWEP, which meant that fewer than 10 countries would participate for the full three years, a more realistic target for measuring program efficacy would be approximately 855,000.

Chapter 4

GENERAL ASSESSMENT OF PROGRAM OBJECTIVES

4.1 Purpose and Word of Caution

By virtue of its scope, the PC/GWEP cuts across the health, sanitation, and water supply sectors and reflects activities ranging from programming (planning, monitoring, and evaluation) to training, collaboration, and research. The combination of sectors and activities is rendered yet more complex by differences in the needs and potential of each target country. The Peace Corps approach to programming necessarily favors the country context.

Because the range of possible results is very great, a combined assessment of the program for all the participating countries would limit the reliability of general conclusions. For this reason, the information below is offered as an indication of trends and possibilities, not as a final tally of results.

Nevertheless, the momentum generated by the PC/GWEP has been remarkable and the impact of the program has extended far beyond the Peace Corps itself. The sections below provide a quantitative analysis of each program component. A qualitative country-by-country review is offered in the next chapter.

4.2 Data Collection

The assessment of the PC/GWEP relied on quantitative and qualitative information, using several methodologies.

4.2.1 Questionnaires

Two written questionnaires solicited the opinions of APCDs and volunteers involved in GWE, respectively (see Table 1). Responses were received from nearly 100 percent of the 13 APCDs or CDs and 65 percent of the PCVs involved in some GWE activity. More significant, the number of PCV responses (48) exceeded the total number of PCVs (39) for whom GWE was a primary activity. (The actual questionnaires are included as Appendices D and E.)

4.2.2 Case Studies

Case studies were prepared by volunteers in two countries to describe the likely cause-and-effect relationships between interventions and positive (or negative) outputs and outcomes (see Appendices G and H).

One study from central Benin reported a 50 percent GWD reduction over two years in four villages where the disease was endemic. This success was achieved by the demonstration and

Table 1**QUESTIONNAIRE RESPONSES RECEIVED**

<i>Country</i>	<i>APCD</i>	<i>PCV</i>
Benin	yes	9
Cameroon	yes	2
Central African Republic	yes	0
Côte d'Ivoire	yes (CD)	1
Chad	yes (CD)	0
Ghana	yes	2
Mali	yes	2
Mauritania	yes	14
Niger	(cable)	0
Nigeria	yes	5
Togo	yes	13
TOTAL RESPONSES RECEIVED	10+ cable	48
TOTAL PERSONNEL IN GWE ACTIVITIES	11 (96% response)	74 (65% responses)

sale of cloth filters, follow-up surveys on the use and maintenance of filters, simple first aid for victims, monthly surveillance, public health education demonstrations, and safe water supply. The conclusion drawn is that an integrated approach which includes water supply is most effective in reducing GWD.

Two contrasting case studies from northern Ghana described differences in GWD incidence in two communities. Both participate in a Global 2000 program, which relies on village health volunteers (VHVs) for health education and data collection. One village has been free of GWD for 15 months, while in the other, incidence has been uneven. The key variable, the studies imply, is not local conditions but the relationship between the VHV and the community. Where Peace Corps volunteers serve as VHV supervisors, motivation is a priority.

4.2.3 Interviews and Focus Group Discussions

Evaluation team members conducted field visits and interviews in Ghana, Benin, Mauritania, and Nigeria, and arranged focus group discussions with selected APCDs, PCVs, and national coordinators at the third annual Peace Corps GWE workshop in Nouakchott, Mauritania. These exchanges permitted refinement of quantitative data from the questionnaires and a deeper appreciation of country-level achievements and constraints.

4.3 Program Inputs

4.3.1 PC Personnel (PCVs: 74 percent of proposed target)

A target of 100 PCVs, 10 in each of 10 countries, was proposed for the end of the program period, and 74 percent of this target was achieved, a good effort for the initial years of a program (see Table 2). Distribution of PCVs among GWE countries is uneven. There are none in countries that have no current GWE program but strong surveillance activities (e.g., Central African Republic (CAR), close to eradication) or in which program activities have just begun (e.g., Niger). Côte d'Ivoire will have a Tulane volunteer in mid-1992. Otherwise, a shortfall in the number of program PCVs occurs for a variety of reasons: in Chad because the program is weak, in Ghana because additional volunteers have not arrived, in Cameroon because the needs are small and highly technical.

Similarly, there are variations in the time spent by APCDs (or CDs) on GWE activities. On average, each PCV in the program demands approximately two percent of the APCD's time. The APCD's total program should be considered, therefore, when an increase (or reduction) in GWE/PCVs is planned.

4.3.2 Collaboration with Host Country Personnel (moderately successful)

In many countries, PCVs work closely with counterparts or other host country personnel. Although this collaboration was not included in the planned targets for the program, it has yielded undoubted benefits for capacity building and sustainability. Currently, 33 PCVs work closely with counterparts, while 12 do not.

4.3.3 Participating Countries (110 percent of proposed target)

Ten countries were expected to enter the PC/GWEP during the life of the program. By 1992, there were 11. Participation in the program changed owing to interest (or lack of it), broad new policy strategies by the donor agency (e.g., targeting Côte d'Ivoire, Nigeria), and relative lack of need (Guinée, Senegal). Only Kenya, which figured in the original list, has failed to enter the program despite the need in endemic regions.

Table 2**PEACE CORPS PERSONNEL IN GWE ACTIVITIES**

<i>Country</i>	<i>1st Job</i>	<i>2nd Job</i>	<i>Total</i>	<i>% time APCD</i>
Benin	9	6	15	40
Cameroon	1	3	4	10
CAR	0	0	0	0
Côte d'Ivoire	0	0	0	0
Chad	0	2	2	2
Ghana	1	2	3	10
Mali	1	5	6	15
Mauritania	0	14	14	25
Niger	0	0	0	0
Nigeria	5	0	5	25
Togo	22	3	25	50
TOTALS	39	35	74	

4.3.4 Funding (successful)

The original plan proposed a search for third-party funding during the life of the program. A detailed description of funding is given in Chapter 6. While over \$255,000 in counterpart funds were garnered at the central level—chiefly from the VBC Project—efforts in the field were less successful. Only Cameroon and Benin received third-party financing for PCV projects, in the first instance from a private donor and in the second from UNICEF. This lag in fund raising parallels the slow absorption of country packet funds in the initial stage of the program. At present seven countries have requested the additional discretionary funds. Demand for financial inputs is likely to grow as the current momentum builds in the field.

4.3.5 In-kind Material Support (successful)

Nylon filters, the chemical temephos (Abate), and transport are three common in-kind contributions to the PC/GWEP. By mid-1992, all anticipated needs for filter material and Abate through 1995 had been committed by one donor. Occasionally, distribution in country remained an obstacle. In some instances, Ministries of Health had not requested their share of the contribution. In others, logistical and other weaknesses persisted. While few PCVs are involved in chemical treatment of water points, PCVs in seven countries distribute or sell nylon filter material.

4.4 Calendar of Activities (respected overall)

Overall, the calendar of activities outlined in the previous chapter has been followed. Three annual Peace Corps GWE workshops have been held, and other meetings attended. Countries have entered the program in staggered succession, if not in the order foreseen. Indeed, the greatest challenge appeared in 1992, with PC posts in countries wholly new to GWE seeking to join the program. Eager to participate in the PC/GWEP, the Peace Corps in two countries still awaits the development of national plans.

4.5 Program Outputs: Building Peace Corps Strength

4.5.1 Technical Support to Program Planning (80 percent overall achieved)

With WASH assistance, several documents were developed early in the program. They included the Peace Corps' "Concept Paper: Guinea Worm Eradication Program," Notes to the Peace Corps/WASH Guinea Worm Eradication Program Planning Meeting, and a program paper developed by a consultant. These documents established the broad outlines, which were to be modified by four interventions: annual workshops, model programming materials, disease surveillance and research, and consultant planning support.

4.5.1.1 Annual Planning Workshops (100 percent achieved)

The annual workshops were intended to impart planning and programming skills to APCDs, PCVs, and their counterparts. Each closed with the formulation of national GWE plans which, in the first two years, mixed national and Peace Corps objectives. Few, however, paid detailed attention to the role which the Peace Corps would play in realizing these objectives or to the support required from W/S, OTAPS and other PC/GWEP partners. Although they served as an important forum for training and exchange, the workshops did not fully meet Peace Corps planning needs.

4.5.1.2 Model Programming Materials (150 percent achieved)

Tools designed for Peace Corps program planning reached every post. They included a programming and training manual "Helping Communities to Eradicate Guinea Worm: A Training Guide" (WASH, 1990), and a document entitled "Programming Guide for Guinea Worm Eradication" (WASH, 1990). A more recent planning guide is "Community-based Initiatives to Eradicate Guinea Worm" (VBC, 1992). These documents are similar in content and quality, and although some collaborating partners raised questions about duplication, the dearth of good program planning material for community-level GWE activities suggests that overlap has benefits.

4.5.1.3 Disease Surveillance (50 percent achieved)

Disease surveillance and operational research provide information about programming impact. About one-half of the 39 respondents to the PCV questionnaire indicated that they carry out some form of surveillance at 96 sites, nearly always in partnership with other agencies or institutions. (One exception is the excellent PC/GWEP in Togo, which has developed its own surveillance and community health reporting form. See Appendix I.) Only eight PCVs who were engaged in surveillance could quote solid surveillance data in their responses at 45 sites. This suggests that PCVs do not receive feedback from their efforts and therefore have a vague notion of program impact.

4.5.1.4 Country-level Planning Consultation (20 percent achieved)

Consultant support in program planning was expected for three PC posts each year. This was rarely provided. Cameroon, and more recently Nigeria, have benefitted from consulting services. Currently, of the 11 participating posts, only three have a specific program plan for the PC/GWEP, four have a PC/GWEP workplan, and four have some form of GWE activity built into programs for health, water supply, or rural development. A marked unevenness in the quality of PC/GWEP activities is best overcome through hands-on planning support.

4.5.2 Information Sharing (55 percent achieved)

Information sharing was to be achieved through a GWE information network, regular distribution of GWE periodicals and materials, exchanges during annual workshops, designation of an information coordinator, and encouragement of exchanges among countries. An assessment of information flow was included in the APCD questionnaire. Responses from 10 of the 11 field posts were:

Periodicals:

- a. "Guinea Worm Wrap-Up" (Global 2000/CDC)
received-7 not received-3 very useful-4 useful-2 not very useful-2
- b. "As the Worm Turns" (W/S, OTAPS)
received-10 not received-0 very useful-4 useful-5 not very useful-2

Informational Papers:

- c. "Guinea Worm Disease: VBC Tropical Disease Paper No. 4"
received-6 not received-4 very useful-2 useful-2 not very useful-2

Audio-Visual:

- d. "The Fiery Serpent"
received-6 not received-4 very useful-3 useful-3 not very useful-0
- e. "The Waters of Ayole"
received-9 not received-1 very useful-7 useful-3 not very useful-0

Reports:

- f. "Workshop on Guinea Worm Control at the Community Level: A Training Guide" (WASH)
received-8 not received-2 very useful-3 useful-4 not very useful-1
- g. "Adding Guinea Worm Components: Guidelines for Water and Sanitation Projects" (WASH)
received-7 not received-3 very useful-0 useful-4 not very useful-2
- h. "Guidelines for Implementation Planning for Guinea Worm Control Programs" (WASH)
received-7 not received-3 very useful-1 useful-6 not very useful-0
- i. "Peace Corps Programming and Evaluation Workshop, Accra, Ghana" (WASH)
received-8 not received-2 very useful-1 useful-4 not very useful-1
- j. "Programming Guide for Guinea Worm Eradication" (WASH)
received-8 not received-1 very useful-2 useful-5 not very useful-0
- k. "Orientation to Guinea Worm Disease: A Guide for Use in Pre-Service and In-Service Training" (WASH)
received-8 not received-2 very useful-2 useful-5 not very useful-0

- l. "Teaching Guinea Worm Prevention in Secondary Schools: A Guide for Training Peace Corps Volunteer Teachers" (WASH)
received-7 not received-3 very useful-1 useful-2 not very useful-3
- m. "Peace Corps Guinea Worm Eradication Program Start-up Workshop"(WASH)
received-7 not received-3 very useful-1 useful-4 not very useful-1
- n. "Training-of-Trainers Workshop: Peace Corps Guinea Worm Eradication Program" (WASH)
received-8 not received-2 very useful-0 useful-5 not very useful-1
- o. "Guinea Worm Eradication Workshop Report" (WASH)
received-8 not received-2 very useful-0 useful-4 not very useful-2

Networks:

- p. Material from the Guinea Worm Information Network (VBC/WASH)
received-4 not received-6 very useful-0 useful-3 not very useful-2

4.5.2.1 Information Network (50 percent achieved)

Through WASH and VBC, a structure was established for the GWE information network. An apparent weakness in the system, however, was that few field posts knew about the network or the services it could provide.

4.5.2.2 Guinea Worm Periodicals and Documents (80 percent achieved)

All respondents regularly received the Peace Corps' "As the Worm Turns" and 70 percent received the CDC's "Guinea Worm Wrap-Up." Other publications were reported to have reached only about 25 percent of the audience or less. Several PCVs indicated that few useful GWE programming documents reached them in the field.

4.5.2.3 Workshop Information Exchange (85 percent achieved)

Annual workshops in theory are occasions for formal and informal exchange of experiences and ideas. While group work on common problems was encouraged, less time was allotted for sharing approaches in specific situations.

4.5.2.4 Information Coordinator (10 percent achieved)

Only one country office designated a PC/GWEP information coordinator. The others reported they were not aware of this requirement.

4.5.2.5 Information Sharing (50 percent achieved)

PCVs reported that information sharing of experiences among countries outside the workshop setting has been limited throughout the life of the program. Field visits to other countries or exchanges of personnel are extremely rare.

4.5.3 Training (more than 100 percent achieved overall)

The PC/GWEP stressed training and set specific targets for PCVs (pre-service and in-service training), national partners, and communities.

4.5.3.1 PST Training Modules (100 percent achieved)

PST modules were developed for GWE volunteers and volunteers serving in GW endemic areas. All modules emphasized GWE health education, but were modified to suit the program thrust in each country. PST modules range in extent from one day to an intensive course of several weeks (Nigeria). Volunteers are aware of these variations. A number argue for integrated training that includes other interventions such as water-borne diseases and water and sanitation technologies.

A total of 262 volunteers reported they had received PST during the life of the program. Its effectiveness was rated as follows: very effective, 14; effective, 22; not very effective, 8.

4.5.3.2 Five-day In-country GWE Modules (200 percent achieved)

Two modules have been developed in this category. One focuses on IST of PCVs ("Helping Communities to Eradicate Guinea Worm" [WASH, 1990]) and the other on PCV planning and training-of-trainer activities at community level ("Community-based Initiatives to Eradicate Guinea Worm" [VBC, 1992]). The first has been put into use in draft form; the second is still in the press. Both are scheduled for translation into French.

Meanwhile, some countries have developed their own in-country training modules. Mali was among the first to conduct a community training-of-trainers exercise. In Ghana, the Peace Corps is supporting the training of GWE village volunteers.

Altogether 44 PCVs have participated in community-level TOT exercises. In-service training is discussed below.

4.5.3.3 In-country GWE Workshops (88 percent achieved)

The initial PC/GWEP called for 10 GWE workshops in three years in each country. In view of the staggered entry of countries into the program, the total would be about 50 workshops. Six of the seven country posts actively participating held GWE training events. The actual number of in-country workshops held was 42.

4.5.3.4 In-service Training (68 percent achieved)

The initial PC/GWEP expected that 240 PCVs would be trained in GWE through in-country IST. A total of 162 are reported to have received this training, a figure that may be an underestimate because questionnaire returns from PCVs involved in GWE were only 65 percent complete. Elsewhere PCVs have suggested more IST for volunteers who are either transferred to GW endemic areas during their tour of duty or who develop an interest in GWE programming while in the field.

4.5.3.5 Annual Workshop Training (100 percent achieved)

One purpose of the annual GWE workshops was to provide a training forum. This objective has been fully met. The first workshop contained a training module on planning, the second a section on surveillance, and the third a short exercise on monitoring and evaluation.

4.5.3.6 Locally Adapted Training Materials (86 percent achieved)

Six of the seven active GWE country posts have developed country-specific training materials.

4.5.3.7 Other Training

Initial program objectives do not include specific targets for school or health worker training; however, these categories are listed as indicators of program outputs. It is not possible to measure the level of achievement of these activities, but quantified outputs are: 980 community health workers trained; 104 primary schools contacted and 11,000 primary school students informed about GWE methods; and 11 secondary schools contacted and 1,500 secondary school students educated in GWE.

4.5.4 Collaboration (overall 70 percent achieved)

A key objective of the PC/GWEP is to promote regular collaboration at global, national, and local levels.

4.5.4.1 Semi-annual Program Planning (0 percent achieved)

The PC/GWEP called for two planning meetings a year for core participants (PC, WASH, VBC, CDC). These meetings were not held, although informal or task-specific exchanges were common. Some participants, however, expressed the view that the lack of a working forum resulted in duplication of effort in some instances and a failure to provide needed support to the Peace Corps in others. Although all participants attended the quarterly meetings of the Interagency Coordinating Group on Dracunculiasis (see below), the thrust of these meetings was informational and not programmatic.

4.5.4.2 African Regional Conferences (100 percent achieved)

The Peace Corps participated in the WHO-sponsored African regional conferences held in 1990 and 1992. Following the 1992 meeting, some donors questioned the usefulness of a global forum and expressed a preference for regional and national efforts.

4.5.4.3 Interagency Coordinating Group (100 percent achieved)

The Peace Corps attended all quarterly meetings of the Interagency Coordinating Group on Dracunculiasis during the program period.

4.5.4.4 Coordinated Integration of GWE (50 percent achieved)

All PC/GWEP participants agreed that an integrated approach to GWE is preferable to a vertical health education approach. The inclusion of water and sanitation, general health education, and rural development requires further coordination, whether within the Peace Corps or with other organizations. At present, 47 of the 75 PCVs who work in GWE consider themselves active in W/S, and 28 devote their efforts chiefly to health or health education. (In theory, all PCVs in GWE should include health education among their activities.)

Thus far, the Peace Corps has not stressed water and sanitation in its GWE program. However, PC does collaborate with other agencies (e.g., USAID, CARE, Oxfam) in water supply and pump repair. One notable example is the Benin Rural Water Supply Program, in which PC was a major partner. Reported W/S outputs include: 346 wells dug (310 in Benin); 20 wells capped (Mali); 172 wells repaired (150 in Benin); 316 pumps installed with PCV assistance (310 in Benin); and two captation systems (Mali).

GWE education reached 1,340 communities, each averaging over 1,000 residents.

More than 7,500 cloth filters were distributed at 689 sites. (Estimates are probably far lower than the actual number.) PCVs estimate, however, that about 10 percent of the total households with which they have contact, including sites in which GWD is not endemic, are using the cloth filters regularly.

In-country coordination of GWE efforts varies in effectiveness. All 11 countries have a national GWE coordinator and eight have a coordinating committee. The Peace Corps is represented on four of these. At the local level, PCVs on average judge the quality of GWE coordination as somewhere between “not very effective” and “effective.” Only one volunteer found local coordination to be “very effective.”

4.5.4.5 Timing of Peace Corps Annual Workshops (100 percent achieved)

The annual GWE workshops were expected to follow the WHO regional conferences. This did happen in 1990 and 1992.

4.5.5 Strengthen GWE Monitoring and Evaluation (25 percent overall)

4.5.5.1 Coordinated Monitoring and Disease Surveillance (25 percent achieved)

The rationale of this objective is that disease surveillance provides a measure of program impact that can be checked against program management indicators provided through monitoring. About one-half of GWE/PCVs participate in disease surveillance activities. Few country-level programs have monitoring plans, and only three posts have GWE program designs. Togo alone has developed a strong monitoring and evaluation tool (see Appendix I).

4.5.5.2 Country-level Monitoring and Evaluation Indicators (25 percent achieved)

Togo has a list of program monitoring and evaluation indicators in its GWE plan, which appears as an appendix in the manual “Programming Guide for Guinea Worm Eradication.” Unfortunately, few posts have utilized this model plan. In countries where the Peace Corps supports the programs of partner agencies (e.g., Nigeria, Ghana, Benin), M&E designs are developed by those agencies.

4.5.5.3 M&E Instruments for Each Country (20 percent achieved)

Togo has developed a complete set of monitoring and evaluation instruments. Six countries have surveillance instruments to capture impact data.

Models for developing M&E instruments may be found in the training guides mentioned in Section 4.5.3. The better of the two for this purpose is VBC’s “Community-based Initiatives to Eradicate Guinea Worm.”

4.5.5.4 Shared Surveillance and M&E Data (40 percent achieved)

One objective of the PC/GWEP is the timely sharing of data. In GWE programs with strong surveillance components, information is regularly channeled to a national center for analysis. But few centers return results to the local levels at which they were generated.

Typically, reports of nationwide GWD searches or program evaluations are circulated in the national capitals. The Interagency Coordinating Group offers a useful forum for such information exchange.

4.6 Program Outcomes (100+ percent achieved)

In Chapter 3, the number of beneficiaries was suggested as an intermediate indicator of program impact. A target of roughly 855,000 beneficiaries was proposed. Responses to the survey questionnaires cite 1,340 communities as beneficiaries of GWE health education; many of these communities have also received some form of improved water supply. The responses also indicate that the number of residents in each community averages around 1,000. Therefore, the program would have reached an estimated 1,340,000 persons, a number which exceeds the revised target.

The ultimate measure of program impact is the rate of reduction in GWD incidence. Owing to the dearth and unreliability of available data in most endemic countries, the intermediate variable was preferred. However, relatively solid evidence from the Benin Rural Water Supply Project shows that GWD was reduced by 75 percent over three years in communities benefiting from the dual interventions of water supply and health education. Over time, similar data for other countries may become available.

4.7 Conclusions and Recommendations

1. Technical support in programming has been channeled to country posts through annual programming workshops and model programming guides. So far, three posts have developed a GWE program, five have incorporated GWE into other programs (e.g., water supply, health education, rural development), and three have no planned GWE activities. GWE programming requires reinforcement through hands-on planning consultancies, as foreseen in the initial PC/GWEP plan.

It is recommended that PC/GWEP activities be emphasized in the field, and that direct planning support be provided to PC posts requesting this assistance.

It is further recommended that the annual workshops be continued in order to refine the Peace Corps role in the context of national GWE plans.

2. An increasing number of PCVs have become involved in GWD surveillance. Unfortunately, compiled data are rarely shared with the collectors or villages most directly affected by the results.

It is recommended that health information structures make a concerted effort to feed back GWD information to volunteers and villages.

3. About 25 percent of field offices or less report receiving some PC/GWEP or related GWE documents.

It is recommended that the failure of some field offices to receive PC/GWEP or related GWE documents be investigated.

It is further recommended that the information needs of GWE/PCVs be granted consideration and that documents be addressed to them directly if necessary.

It is also recommended that the Peace Corps publication "As the Worm Turns" be used operationally for program support.

4. More exchanges of experience and expertise among PCVs would strengthen the PC/GWEP, especially in countries entering the program.

It is recommended that inter-country exchanges be organized.

5. Many volunteers request that GWE pre-service training be broadened.

It is recommended that other water-borne diseases, guidance in water and sanitation technologies, and other related interventions be included in GWE pre-service training modules for volunteers.

6. Good quality modules for training-of-trainers and in-service training have been developed but are not widely available in English and French. Some overlap between modules has been observed.

It is recommended that training modules be printed and distributed in two languages as quickly as possible.

It is further recommended that the development of future training modules be coordinated among participating agencies in order to reduce duplication of effort.

7. *It is recommended that all PCVs posted to GWE endemic areas should be trained in GWE methods, and GWE should be made part of their workplans during GW transmission season. Furthermore, IST should be available for PCVs who are transferred to GW endemic areas during their tour of duty or who develop an interest in GWE programming while in the field. It is therefore recommended that at least one in-country IST be offered to PCVs in every post each year.*

8. Program planning meetings called for in the original PC/GWEP were not held during the program period, and some core participants felt this weakened the efficiency and effectiveness of the program.

It is recommended that quarterly program planning meetings be held for core participants and USAID.

9. In-country national, regional, and local GWE collaboration needs improvement. *It is recommended that PC focal points for GWE participate in national coordinating committees wherever possible. It is further recommended that local coordination be encouraged to improve planning effectiveness and communication.*
10. Monitoring and evaluation are the weak components of existing GWE programs. *It is recommended that country-level M&E plans be strengthened.*

Chapter 5

COUNTRY ANALYSES OF PROGRAM ACHIEVEMENTS AND CONSTRAINTS

Since country contexts differ and GWE programs have reached varying stages of development, an evaluation of achievements and constraints by country and a description of program strategies used could yield useful suggestions for GWE programs elsewhere.

5.1 Benin

5.1.1 National GWE Plan

Approximately one-third of Benin's population is at risk of contracting Guinea worm disease. Benin's current five-year national GWE plan foresees a 50 percent reduction in the number of cases by 1991, 90 percent by 1993, 100 percent by 1995, and certification of eradication by 1997. The plan was drafted after a national conference in 1988. A nationwide search in 1990 identified 37,414 cases in 3,762 villages. Although the plan calls for regular epidemiological surveillance, in 1991 only 4,006 cases were reported, clearly an undercount.

The GWE plan is supported by USAID, UNICEF, OCCGE, and the Peace Corps—the last, until recently, in conjunction with the Benin Rural Water Supply and Sanitation Project (USAID with UNICEF) in Zou préfecture. At the project's start, 52 percent of the cases were reported in this area, and the chief criterion for beneficiary village selection was that Guinea worm was endemic. One anticipated outcome of the project, therefore, was a significant reduction of GWD, and this objective has been achieved. Needs identified by 1991 and 1992 assessments done by VBC, Global 2000, and CDC include stronger national coordination, community-level reporting of incidence, and a concerted expansion of GWE efforts beyond Zou préfecture.

5.1.2 Peace Corps Contribution

The Peace Corps entered the national GWE effort in late 1986, when water and sanitation PCVs were posted to project sites designated by the Zou water supply project. In anticipation of borehole construction, volunteers began to create socio-health committees in affected villages and to conduct sessions in GWD prevention. The Peace Corps also supported a health education campaign for the prevention of GWD in June-July of 1988. In keeping with the Zou project's integrated approach to community water supply and health, secondary tasks of the GWE/PCVs combined general health education with water supply and sanitation, routine village-level GWD surveillance, and the development and testing of country-specific health education and information materials. A quarterly report entitled "Enquêtes mensuelles: surveillance épidémiologique" published on GWD cases and GWE activities contains data

provided by PCVs and their counterparts. By 1990, the project began drawing to a close, and many PCVs who remained in Zou continued the GWE efforts in conjunction with UNICEF, which provides complementary funding and supervision. In 1991, nine of the country's 65 PCVs were assigned GWE as a primary task.

5.1.3 Field-Level Assessment

By mid-1991, new cases of GWD had been reduced by 75 percent in the villages of Zou préfecture that were equipped with handpumps. Field-level questionnaires (1 APCD, 9 out of 15 GWE/PVCs responding), personal interviews, and one case study indicated the ways in which the Peace Corps contributed to this outcome.

1. The main achievements perceived by the field staff are:
 - training 500 Beninese collaborators, including 150 community health workers
 - raising awareness of GWD and its transmission among the population, especially by informing 600 communities and 8,000 primary school students about the disease
 - fostering the development of an informal communications network among people living in the endemic zones of Zou préfecture
 - participating in regular GWE surveillance in villages where PCVs are present and reporting of available results
 - attending quarterly meetings of the National GWE Monitoring Committee
 - promoting W/S sustainability, including water point repair and handpump maintenance
2. Other achievements are:
 - maintaining close collaboration with UNICEF and other agencies at field level
 - using \$4,060 of the GWE country fund packet for three projects funded on a cost-sharing basis with UNICEF
 - distributing 650 monofilament nylon cloth filters
 - contributing to the cost and preparation of two T-shirts bearing GWE messages
 - supporting health campaigns which, according to a recent evaluation of the Water Supply Project, proved an extremely effective educational approach
 - joining in a 1992 national GWE program review with Global 2000/CDC, WHO, and UNICEF
 - hosting the second annual workshop in June 1991

- including a brief GWE module on PST for all volunteers
 - contributing a case study to the third annual workshop, held in Nouakchott, Mauritania, in May 1992 (see Appendix G)
3. Various field staff mentioned the following constraints:
- low health priority of GWD for villagers in some areas
 - traditional beliefs about the etiology and transmission of the disease that militate against health education messages
 - narrow scope of work for some GWE/PCVs, resulting in under-utilization of skills during periods outside the four- to six-month GW transmission season
 - limited PST curriculum for GWE/PCVs in comparison with that designed for PCVs in rural development, for example
 - weak inter-agency collaboration at the national level for supporting PCVs engaged in inter-agency activities and for setting policy for intervention at the community level
 - a PST calendar for new PCVs that ends in December—in the middle of the annual transmission season—and thereby curbs PCV activity and impact in the first year of a two-year assignment
 - limited funding available to PCVs for corollary water supply or health education activities executed independently of the Water Supply Project
 - inadequate transportation for GWE/PCVs who cover large geographical areas for health education and surveillance

5.1.4 Conclusions and Recommendations for Benin

1. PC/GWEP in Benin has been effective and has played a supporting role in the Benin Rural Water Supply and Sanitation Project, and more recently in collaboration with UNICEF. PC/Benin should begin to consider greater participation in the national GWE effort. While sustaining and improving gains made in Zou, it should expand its activities to other endemic areas.

It is recommended that PC/Benin review its PC/GWEP plan in light of the country's assessed needs.

It is further recommended that PC/Benin review its future GWE plans with its chief collaborators, so as to provide more integrated workplans for GWE/PCVs and broaden their geographical scope.

2. PC/GWEP's success in reducing cases of GWD may be attributed in large measure to the integrated design of the Water Supply Project. But the limited contribution of

GWE/PCVs to the W/S component, which concentrated on borehole construction, has led them to believe they were underutilized, secondary players.

It is recommended that future PC/GWEP plans in Benin continue to combine water supply and health education. The Peace Corps may choose to take direct responsibility for some future W/S activities, by undertaking low-cost water supply interventions, for example. In the same way, PC/Benin should consider expanding the health education portfolio of volunteers to include all water-related diseases. This approach will further the goals of GWE while better utilizing PCV skills.

It is further recommended that, given the advantages of an integrated approach to GWE activities, all volunteers in endemic areas take GWE as a secondary job assignment, combining it with health education, education, rural development, small business development, W/S, and other activities.

3. The timing of PST and the entry of PCVs in the middle of the transmission season diminishes the effectiveness and job satisfaction of some GWE/PCVs.

It is recommended that the training schedule for PCVs having GWE as a major task be planned to conclude in September.

It is further recommended that PST for such volunteers include components in health (e.g., diarrheal diseases, nutrition, hygiene), water supply, and literacy.

It is also recommended that training for all PCVs in Benin include a GWE component.

4. Surveillance data provided by questionnaire respondents were good in many instances but uneven overall.

It is recommended that all GWE/PCVs in Benin strive to improve surveillance of GWD cases in villages where they work in order to gain a more accurate assessment of their impact in alleviating the problem and to strengthen the national surveillance effort in the face of a weak passive reporting system. An appropriate means of transport (or an allowance for use of local transport) may be required to broaden the geographical scope of surveillance.

It is further recommended that all surveillance data be fed back from the central HIS office in Cotonou to endemic villages, GWE/PCVs, and their counterparts.

5.2 Cameroon

5.2.1 National GWE Plan

Cameroon has nearly succeeded in eliminating Guinea worm disease. From 1990 to 1991, the total number of cases was reduced from 742 in 86 villages to 393 in 81 villages. Surveillance began haltingly in 1985, and investigations suggested the disease was endemic in two northern divisions and possibly in the southwest. Improved water supplies in much of

the country are believed to be responsible for restricting the disease at present to Mayo Sava division in the extreme north. A plan of action developed in 1986 with the assistance of the VBC Project led to a National Guinea Worm Eradication Plan in 1990 that set 1993 as the eradication target date. By 1991, key eradication strategies were expanded to cover village-based surveillance and case containment. A full case-containment program requires weekly surveillance by VHVs, village-based treatment of lesions, community mobilization, health education, distribution of filters, and monthly treatment of water points with the chemical temephos (Abate).

In 1992, adequate surveillance and case containment in villages with few cases have been given greater attention after little change was noted in the number of endemic villages despite the halving of cases. A recent report notes renewed incidence of the disease in villages that were free a year ago and believes that travellers from other endemic areas may be the cause.

Because Cameroon has long been ahead in the elimination of GWD, its experience at these final stages of eradication may serve as a useful model for other countries reaching this late phase in the struggle.

5.2.2 Peace Corps Contribution

Concerted GWE activities in Cameroon began in 1986, with support from several external agencies, including USAID (VBC Project with Tulane University), UNICEF, CARE, OCEAC, Church Missions, and more recently Global 2000, World Neighbors, and the Peace Corps. Because GWE activities were well advanced by 1989, the PC/GWEP originally was considered a pilot program, with \$20,000 in country funds to be allocated in 1990. About \$6,000 was disbursed in that year for development of health education materials with UNICEF. These included Guinea worm education cards and posters, and training booklets for use by local animators.

Meanwhile, UNICEF stepped up its support for water supply projects in the endemic Mayo Sava division and in the early years of the program furnished a supply of Abate. GWE in Cameroon has stressed application of Abate and more recently distribution of nylon filter material.

Overall, Peace Corps inputs have been modest but significant in an effort already well supported by other donors. A community development volunteer working in Mayo Sava division since 1989 on well treatment, education, and surveillance was the first to be given GWE responsibilities. In 1991 he was joined by a second volunteer, a master's degree student in public health, who also served as liaison and planning assistant to the local GWE national coordinator. Her efforts focused on community health education, training of VHVs, and development and supervision of a local surveillance and computer-based health information system. In addition, three PCVs, one in rural development and two in W/S, are engaged in GWE as a secondary project.

5.2.3 Field-Level Assessment

1. The main achievements perceived by the field staff are:
 - a systematic approach to GWE planning, combining planning documents, training of nationals, and development of computer-based surveillance systems to ensure sustainability
 - strong work satisfaction among the 4 PCVs engaged in GWE activity
 - increased demand by communities for GWD-prevention measures, including use of handpumps, well construction, and more health care
2. Other achievements are:
 - the PC's role in national planning and in the national GWE coordinating committee
 - strengthening of national GWE efforts through full utilization of PCV technical and planning skills in public health
 - 18 host country nationals trained in GWE
 - at least 40 of 81 endemic communities receiving health education
 - three surveillance visits in 25 villages with 355 cases in 1991
 - providing GWE training for 20 PCVs during PST
 - distributing over 2,000 filters to 28 villages, with a utilization rate of 50-75 percent
3. Field staff also mentioned the following constraints:
 - the quality of statistics is sometimes dubious and case confirmation is difficult
 - ethnic diversity limits the impact of health education materials and of health care workers who do not speak the language of the communities to which they are posted
 - inadequate communication and information sharing with the new and relatively well-trained GWE/PCVs in Nigeria
 - the disproportionately high management load of the APCD despite the limited size of the PC/GWEP in Cameroon
 - the absence of a primary school GWE curriculum
 - the lack of more sophisticated training (especially in evaluation and surveillance techniques) for PCVs in GWE supervisory capacities
 - well treatments are not always carried out properly and often conflict with other scheduled duties

- although surveillance data are analyzed, their significance for program management is not explained at district level

5.2.4 Conclusions and Recommendations for Cameroon

1. The APCD/Health in Cameroon observed that "in the course of working through the program and making the inevitable initial errors, we have discovered many resource people who could help other countries." The level of sophistication in the Cameroon program and among its participating volunteers should be recognized.

It is recommended that PCVs with GWE-related technical skills should visit other countries having PC/GWE programs.

It is further recommended that the Peace Corps include GWE/PCVs from Cameroon in future special public health training activities.

2. It is erroneous to assume that Cameroon's progress toward eradication warrants a reduction in PC personnel.

It is recommended that the Peace Corps continue to provide personnel to GWE in Cameroon in light of the 1993 target date for eradication.

3. Schools so far have not been targeted for GWE health education, although a primary school program is planned for the near future.

It is recommended that the Peace Corps support a primary school GWE program with country packet funds as a means of sustaining the gains of the GWE effort.

5.3 Central African Republic

5.3.1 National GWE Plan

Before 1986, GWD was endemic in several sub-préfectures of the Central African Republic (CAR). Since that time, drought has interrupted disease transmission in many villages. A national survey of health and administrative personnel from January to July 1991, conducted with support from the Peace Corps, UNICEF, and other agencies, revealed only 10 unconfirmed cases.

From this it would appear that GWD has been very nearly eradicated. But the survey results in six sub-préfectures bordering countries with endemic zones are suspect. National authorities propose a search in these areas during the current year to confirm the cases reported or determine that no new cases exist.

GWE strategies planned to match the results of the search are to reinvigorate the national surveillance system in order to qualify for certification of eradication, to train paramedicals in detection and treatment, and to increase the sources of safe water.

5.3.2 Peace Corps Contribution

Peace Corps funds from OTAPS were used to support the national survey.

5.3.3 Field-Level Assessment

A communication from the PC field office observed that "the preliminary CAR GW incidence studies, which OTAPS helped us carry out, showed that the severe drought of the early 80s eradicated dracunculiasis in almost all the highly endemic areas. While the government continues to implement the eradication program, progress has been slow in completing the case finding/incidence surveys." And further, "For the moment we are not involved in GWE activities on a large scale. . . and we have no volunteers currently working on GWE."

1. The main achievements perceived by the field staff are:
 - keeping in contact with the GWE national coordinator
 - supporting GWE surveys
 - distributing GWE publications and newsletters
2. The one constraint mentioned is:
 - limited funding for a government program

5.3.4 Conclusions and Recommendations for CAR

1. At the third annual workshop in Nouakchott, Mauritania, the national GWE coordinator presented a plan to search out cases in areas where GW is believed to be endemic.

It is recommended that OTAPS support this important step in developing a national GWE plan of action through 1995.

5.4 Chad

5.4.1 National GWE Plan

Chad has developed a preliminary GWE plan and has named a national coordinator. Surveillance is weak, and the number of current cases is unknown. A search scheduled for early 1992 has been delayed. Once completed, it will form the basis of a national plan of action.

5.4.2 Peace Corps Contribution

PC/Chad is developing a provisional action plan to assist the national coordinator. Interventions proposed by the government for the next year include completion of the national search, development of job descriptions for PCVs engaged in GWE, acquisition of filters, and counterpart training.

Implementation will begin in earnest when a GWE/PCV from the Tulane program arrives in summer 1992. An APCD responsible for GWE has recently arrived at the post. Meanwhile, two PCVs have expressed an interest in GWE as a secondary activity, but so far neither has received GWE training.

5.4.3 Field-Level Assessment

There have been no PC/GWE activities thus far, in the absence of a national GWE plan of action and adequate PC personnel. A GWE IST meant to train two PCVs was canceled.

5.4.4 Conclusions and Recommendations for Chad

The Country Director of PC/Chad is interested in receiving assistance to develop a PC/GWEP.

It is recommended that a consultant be sent to assist the PC/GWE planning exercise after the arrival of the GWE/PCV. The consultancy could follow the completion of the 1992 national search but should not be delayed unduly.

5.5 Côte d'Ivoire

5.5.1 National GWE Plan

Côte d'Ivoire has approached GWE by improving the water supply. More than 12,000 wells have been rehabilitated since 1989. In 1991, a public health approach to GWE was adopted, and a national search uncovered 20,064 cases in 560 endemic villages. A national plan of action was developed in February 1992, and a national Guinea Worm Day and seminar was planned for April, in coordination with a general mobilization for GWE in Francophone West African countries.

5.5.2 Peace Corps Contribution

In January 1992, two of the country's 42 PCVs were posted to endemic areas and await development of a PC/GWE plan in cooperation with the national GWE coordinator. One PCV from the Tulane program will join the post this summer. Meanwhile, UNICEF has developed a GWE action plan, anticipating close cooperation with the government.

5.5.3 Field-Level Assessment

The fledgling PC/GWEP has yielded few results thus far. One achievement is the planned posting of the GWE/PCV in mid-1992. Constraints stem from the very recent development of the national plan and inadequate cooperation and communication among donors and with the national authorities. Other constraints are related to the weakness of national disease strategies. So far, the Peace Corps has not been asked to join the national GWE coordinating committee.

5.5.4 Conclusions and Recommendations for Côte d'Ivoire

1. The PC/Côte d'Ivoire Country Director is interested in assistance with developing a PC/GWEP.

It is recommended that PC furnish a planning consultant to PC/Côte d'Ivoire following the arrival of the volunteer from Tulane.

2. In view of the high number of GWD cases (20,064) in a country of 16 million persons, GWE should figure as an important public health concern.

It is recommended that PC/Côte d'Ivoire recognize the very useful contribution it could make to the GWE effort and utilize its human resources accordingly.

It is further recommended that PC experiences from similar countries (e.g., Ghana, Togo, Benin) be shared with PC/Côte d'Ivoire through visits or exchange of personnel to increase the effectiveness of the future GWE program.

It is also recommended that all PCVs posted to GW endemic areas be assigned GWE as a secondary job activity, but within the framework of an integrated GWE strategy including surveillance, health education, water supply, etc.

It is finally recommended that all PCVs receive in-country training in GWE theory and practice with the materials, curricula, and trainers available. Assistance from OTAPS should be requested.

3. One reason for the slow development of a PC/GWEP in Côte d'Ivoire is the absence of an APCD responsible for health.

It is recommended that a health APCD be appointed to the post.

4. PC/Côte d'Ivoire has played a small role thus far in supporting GWE.

It is recommended that PC/Côte d'Ivoire take advantage of all GWE workshops, training activities, and GWE-related materials made available by the Peace Corps.

5.6 Ghana

5.6.1 National Plan

Ghana's GWE program, started in 1987, has set 1993 as the eradication target date. In 1988, the program was given a boost when the head of state visited 22 endemic villages. A strategy combining rural water supply, health education, surveillance, community mobilization, distribution of filters, and water treatment with temephos (Abate) has significantly reduced the incidence of GWD.

Such improvements as replacing "gray baft" (cotton) filters with monofilament nylon cloth have accelerated program impact. Between 1990 and 1991 alone, the number of cases reported by village search or monthly surveillance was cut in half. Assisting in this combined effort are Global 2000, USAID, UNICEF, DANIDA, JICA, the World Bank, World Vision, CCCE, and the Peace Corps. A cadre of 5,600 volunteers provide routine surveillance data, offer health education, and mobilize support in their home villages.

With 66,697 cases and 3,718 endemic villages reported in 1991, Ghana has one of the highest rates of incidence in Africa. About half of the cases occur in the northern region, and the remainder in the Brong Ahafo, Volta, and central regions. In 1991, the Ministry of Health (MOH) granted greater responsibility to the regional authorities for GWE planning, surveillance, and program implementation.

5.6.2 Peace Corps Contribution

Peace Corps support to GWE in Ghana began in 1988, predating the PC/GWEP for Africa. In that time, two health education PCVs have been assigned to the GWE secretariat. The first was instrumental in designing, developing, and producing a GWE awareness and prevention manual used today in junior and secondary schools throughout the country. The second, now working closely with Global 2000, has developed a training module for village volunteers and will soon organize training seminars using PCV skills.

Two other volunteers have selected GWE as a secondary responsibility, one virtually working full time in her enthusiasm. Global 2000 has requested three more PCVs for mid-level management duties within the national GWE structure. So far, however, the PC/GWEP has figured as a component of the post's W/S plan.

The Peace Corps has not had a lead role in national level planning, monitoring, or coordination and is not a member of the national GWE coordinating committee, on which Global 2000, MOH, UNICEF, and WHO are represented. But PC's expanded grass-roots activity in financing, planning, and executing VHV training—a critical component in the eventual success of the eradication program—would give it a strong position in GWE at the national level.

5.6.3 Field-Level Assessment

1. The main achievements perceived by the field staff are:
 - serving as “a minimal but consistent presence” in GWE activities
 - developing the *Teacher’s Training Handbook on GWD* and the *Village Volunteers GWE Training Programme*
 - providing TOT facilitation and guidance for 250 orientation sessions of 5,600 VHVs
 - developing appropriate “homemade” health education materials
 - co-designing national guidelines for health education
 - participating in the design of health education materials for national use
 - evaluating village-level training activities
 - preparing a community mobilization packet and introducing it to the regions
 - conducting GWE education tours for 18 schools and churches and 20 village groups, ranging in size from 6 to 60
2. Other achievements are:
 - including GWE modules in four PSTs and three ISTs since 1989
 - teaching 800-1,000 primary and 1,000-1,500 secondary students about GWE
 - distributing hundreds of gray baft and nylon cloth filters and explaining their use
 - contributing two case studies to the third annual Peace Corps GWE workshop in Nouakchott, Mauritania, in May 1992 (see Appendix H)
3. Various field staff also mentioned the following constraints:
 - surveillance data are not yet uniformly reliable, although the quality is expected to improve following VHV training
 - surveillance statistics are not always fed back to the villages or the PCVs who work there
 - inadequate transportation limits the effectiveness of the PCV
 - the GWE module in PST was not readily applicable to the village context; PCVs thought the training was “not very effective”
 - appropriate GWE educational materials are not easily available
 - weak local collaboration with Global 2000; PCVs are not always included in local-level GWE planning or mobilization events

- lack of adequate accommodation for PCVs, which, by agreement, must be provided by the government
- women PCVs are not wholly accepted as spokespersons for GWE in Muslim areas, but should not be discouraged from continuing their efforts.

5.6.4 Conclusions and Recommendations for Ghana

1. PC/Ghana is fully committed to the GWE effort and intends to remain so until the goal is achieved, whether in 1993 or later. With its more active participation in VHV training since 1991, it could have a stronger voice in national coordination efforts to ensure full support for PCVs in the field.

It is recommended that PC/Ghana join the National GWE Coordinating Committee and any other relevant coordination and planning groups.

2. While PC/Ghana is making a significant contribution to VHV training, the training of its own volunteers is seen as inadequate, impractical, or simply misdirected considering the realities experienced in the field.

It is recommended that GWE training be reviewed.

Because PCVs often recognize the need for GWE intervention at their site only after they have arrived, *it is further recommended* that emphasis be placed on IST for PCVs who request further training. (May be met in part by PCV participation in the VHV training.)

3. With the participation of PC/Ghana in VHV training, PCVs could assume a greater role in supervising VHV activities (surveillance, health education, mobilization, etc.) in their home villages. They would be greatly aided by adequate transportation.

It is recommended that the usefulness of PCVs as supervisors of VHVs be examined.

It is further recommended that material support be provided, where possible, to assist them.

4. A review of the curriculum under recent national educational reforms offers a unique opportunity to introduce teaching materials on GWE.

It is recommended that the Peace Corps and its partners pursue this opportunity with the government.

5.7 Mali

5.7.1 National GWE Plan

Mali has developed a provisional GWE plan, named a coordinator, and created a national GWE coordinating committee of which the Peace Corps, UNICEF, WHO, UNDP, and other agencies are members. The first national search for GWD cases began in December 1991, concentrating on the four southern provinces, where the disease is highly endemic. Case finding will continue in 1992 in two other provinces.

In 1991, reported cases nationwide totaled 13,793 in 1,009 endemic villages. A revised national plan of action will be developed following completion of the case search. At present GWE interventions are very limited and centered in Douentza district with support from IMPACT and the Peace Corps. Cloth filter distribution and chemical treatment are expected to begin after the national action plan is completed.

5.7.2 Peace Corps Contribution

The structure of PC/Mali has been designed to support its principal program, the African Food Systems Initiative (AFSI). PCVs are organized in teams working on well construction and repair, spring captation, agricultural development, and so on.

GWE activities began in mid-1989 as a corollary of W/S projects in endemic areas of Bandiagara district and later in Douentza district. Two AFSI teams have incorporated GWE into their long-term plans of action. At present six volunteers work in GWE as a secondary job activity. In late 1992, one third-year PCV will assume the job of GWE coordinator for the country-level PC/GWEP.

Thus far PCVs have had no in-country GWE training, apart from a "small component" in the PST. The post has recently begun activities in the health sector and has not yet defined the role of GWE in its sectoral plan. The present APCD foresees the future role of the Peace Corps as "providing important assistance in establishing national eradication strategies and field testing new methods" rather than undertaking village-level interventions. GWE training would strengthen this role.

5.7.3 Field-Level Assessment

PC/Mali strongly favors an integrated approach to GWE combining health education with water supply. Without safe water in this Sahelian environment, the office argues, education cannot be effective. The APCD believes that "with multisectoral/integrated teams in place, GWE interventions present a unique and satisfying opportunity to initiate sustainable development."

1. The main achievements perceived by the field staff are:
 - being the first group to introduce GWE health education at the village level, specifically, TOTs for 48 villages in Bandiagara, and for 30 more in the same district and 8 in Douentza in 1992
 - providing safe water by digging, capping, and repairing more than 20 wells, and constructing two captation systems
 - developing Dogon-language flipcharts and slide show for TOTs
 - naming a third-year volunteer to coordinate GWE efforts and to design monitoring and evaluation systems
2. Other achievements are:
 - training 50 community workers in GWE methods
 - conducting information sessions on the use of cloth filters when nylon filters are not available
 - obligating a large proportion of the GWE country packet funds
 - undertaking informal surveys of endemic areas to assess the condition of water points and the number of GWD cases
3. Various field staff also mentioned the following constraints:
 - in Mali's harsh environment, most difficulties in executing a GWE program are logistical
 - intersectoral coordination for GWE is weak, and counterpart support has not been organized
 - educational materials appropriate for the country have only recently been developed
 - some villagers do not drink from a safe water source because they prefer the taste of pond water

5.7.4 Conclusions and Recommendations for Mali

1. PC/Mali's role in a national GWE strategy will require additional GWE training.
It is recommended that PCVs with GWE as a primary or secondary task receive technically oriented IST during 1992.
2. The expected national action plan will enable PC/Mali to refine the PC/GWEP.

It is recommended that a new GWEP be developed to incorporate the twin objectives of expanding health education and safe water supply and that assistance should be requested from OTAPS as required.

It is also recommended that close collaboration with Host Country Nationals (HCNs) in GWE training and program implementation be developed to ensure sustainability among highly dispersed populations.

Given the new GWE coordinator's role in "monitoring and evaluation," *it is further recommended* that a strong monitoring and evaluation component be incorporated into this new plan.

3. Travel is important in GWE activities and GWE coordination.

It is recommended that logistical constraints in the program be examined.

4. PC/Mali has been successful in developing training activities and materials.

It is recommended that the office capitalize on these successes by sharing them with counterparts and all PCVs in the country.

5. Typically, the AFSI teams cooperate with government structures but work independently of them.

It is recommended that GWE activities be closely coordinated with national structures to ensure sustainability of the GWE effort.

5.8 Mauritania

5.8.1 National Plan

Mauritania was one of the first West African countries to develop a national GWE plan but throughout much of the Eighties achieved little progress toward eradication. A national case search in the five most endemic regions in 1991 reported 8,036 cases in 511 villages. In each of these regions, which together make up 45 percent of the national population, the incidence exceeded five percent. Following this search, a National Dracunculiasis Eradication Program plan was formulated at a national GWE conference in late April 1992.

The plan foresees eradication by 1995 and will: (1) give priority to suspected endemic regions; (2) continue tight surveillance in other regions to verify absence of the disease; (3) intervene in localities of lower risk in a second phase if necessary; (4) give priority to endemic regions in providing water points, constructing 404 and rehabilitating 61; (5) create village health committees in each endemic village and train a village volunteer in health education and surveillance methods; (6) establish health information systems (HIS) for GWD; (7) continue the national search in other suspected regions.

At the third annual workshop in Nouakchott, regional plans were developed along the lines of the national plan but adapted to the needs and constraints of each locality.

No national GWE coordinating committee has yet been formed. The active donors in the program are WHO, UNICEF, Pharmaciens sans Frontières, OXFAM, World Vision, and the Peace Corps.

5.8.2 Peace Corps Contribution

In late 1991, 14 newly arrived PCVs joined the national GWEP. Their job descriptions stress water and sanitation and GWE in equal measure, equipping them to attend to GWD during the season of transmission, which coincides with the rainy season from June through September when well construction is not possible. Nine PCVs were trained in GWE before arrival, and all have had IST thereafter. They have been assigned to regions where the disease affects more than five percent of the population, and all work in close collaboration with the regional directors of social and health activities (DRASS) and the chief medical officers.

5.8.3 Field-Level Assessment

The Peace Corps is poised to assist the government in taking action against GWD during the next transmission season, although the program is only five months old.

1. The main achievements perceived by the field staff are:
 - timely arrival and training of PCVs for the onset of the transmission season
 - one health education session on GWE prepared in a local language
 - several informal discussions, school visits, filtering demonstrations, etc.
2. Other achievements are:
 - hosting the third annual workshop in May 1992, and thereby mobilizing government commitment to the program
 - assisting the DRASS and other regional personnel in developing GWE plans of action for the next 12 months
 - undertaking an initial problem analysis
3. Various field staff also mentioned the following constraints:
 - unavailability of nylon filter material and health education materials
 - lack of enthusiasm in the villages
 - uncertainty among the population about GWD as a health priority
 - inadequate facilities for PC travel to distant villages
 - reluctance to discuss GWD with PCVs

- weak local coordination with GWE program partners
- resistance to the notion of filtering water

5.8.4 Conclusions and Recommendations for Mauritania

1. PCVs find it difficult to convince listeners of the importance of GWE, which is a wholly new concept for the vast majority of the rural population.

It is recommended that practical approaches to persuasion be adopted, e.g., permitting listeners to see the cyclops in drinking water, enlisting the support of local leaders and religious heads, developing homemade educational aids until more sophisticated materials arrive.

2. Less than half of the PCVs report working regularly with counterparts.

It is recommended that the national GWE coordinator and the PC field office encourage HCNs to support the efforts of volunteers.

It is further recommended that a surveillance and monitoring system for which the PCVs and counterparts are jointly responsible be established.

3. PCVs cover from one to 18 villages each, averaging six to seven villages per volunteer, often over a large area.

It is recommended that an appropriate means of transport be provided to volunteers required to work in widely dispersed communities.

4. Some PCVs seek additional GWE training.

It is recommended that periodic IST programs with a strong GWE content be organized by PC/Mauritania, if possible with nearby Sahelian countries.

It is especially recommended that training include locally appropriate techniques in community mobilization.

5.9 Niger

5.9.1 National GWE Plan

Niger conducted a national case search in 1991 that yielded 31,676 cases in 1,510 villages. At the third annual workshop in May 1992, the national GWE coordinator outlined a provisional national plan that calls for: (1) reactivating national and regional GWE coordination committees; (2) holding training seminars at national and regional levels; (3) training VHV's from 1,691 villages; (4) producing and distributing filters and educational materials; (5) constructing and rehabilitating wells; (6) monitoring and evaluating the program; (7) developing a surveillance system with feedback; and (8) treating persons suffering from GWD.

5.9.2 Peace Corps Contribution

In a March 1992 communication, PC/Niger indicates that "implementation of the program has not yet begun. At this time the Peace Corps' role in such a program has not been defined." Pending further discussions with PC/Niger, the national coordinator's provisional plan foresees Peace Corps participation in training, health education, water supply, and monitoring and surveillance.

Meanwhile, several PCVs have assisted in the follow-up validation of the national search.

5.9.3 Field-Level Assessment

PC/Niger has indicated it will report on developments "if in fact we do become involved in an implementation phase of Guinea worm activities in Niger."

5.9.4 Conclusions and Recommendations for Niger

The high incidence of GWD in Niger, especially in the Mirriah region, suggests that the Peace Corps could make a valuable contribution to the GWE effort.

It is recommended that PC/Niger maintain close contact with the national coordinator and define its role in GWE in the first stages of national planning.

It is further recommended that a PC/GWEP be outlined following discussions with the national coordinator and that OTAPS provide assistance if requested.

5.10 Nigeria

5.10.1 National GWE Plan

Nigeria has one of the highest rates of GWD in West Africa. Since its first national conference on dracunculiasis in 1985, the country has made serious attempts to reduce incidence of the disease. A national secretariat and task force are replicated in task forces for each local government area (LGA). The positive impact of these efforts can be measured in survey results: 640,008 cases in 1989, 394,082 cases in 1990, and provisionally 281,937 cases in 1991.

The national GWE plan gives priority to endemic regions for water supply, intense health education and mobilization, distribution of cloth filters, use of temephos, and village-based reporting systems. LGAs where the disease is endemic are scattered, with some concentration in parts of the southeast and northwest. For surveillance, the country has been divided into four quadrants or zones, under zonal coordinators, and VHV's are trained to report cases monthly. Key partners in the GWE effort are UNICEF, JICA, the World Bank, UNDP, Global 2000, and the Peace Corps.

5.10.2 Peace Corps Contribution

The Peace Corps is a member of the national GWE task force and in 1991 designated five volunteers with primary responsibility for GWE. (Two more GWE/PCVs are expected.) The group received an intensive one-month PST at CDC on the public health components of GWE programming, followed by six weeks of in-country training. PC continues to receive technical support from Global 2000, and two IST courses have been held in 1992 for PCVs and counterparts.

The GWE/PCVs are assigned to LGAs in Niger, Plateau, and Enugu states, and support GWE health education, surveillance, filter distribution, and monitoring of local health workers. Members of the National Youth Corps (NYC), in which Nigerian college graduates are required to serve for one year, have a parallel function. PCVs and NYC members undertake the same tasks but serve in different LGAs. The national GWE coordinator considers the arrangement a useful experiment and hopes to encourage a fruitful exchange of successes and experiences between the two groups.

5.10.3 Field-Level Assessment

1. The main achievements perceived by the field staff are:
 - distributing over 5,000 cloth filters
 - building networks with the MOH, Nigeria Guinea Worm Eradication Program (NIGEP), and nongovernmental organizations (NGOs)
 - offering PCVs a clearly defined job that meets a real need
2. Other achievements are:
 - training village-based health workers (VBHWs) in 560 communities
 - integrating GWE activities into an existing government structure
3. Various field staff also mentioned the following constraints:
 - the vertical nature of the program limits the total contribution of a PCV to the community of residence (one PCV observed: "It would be more interesting and fun if more activities were incorporated")
 - extremely high demand for curative care
 - delivery of filters and health education materials has been slow
 - community participation in the GWEP has been poor, and consequently health education and mobilization have been weak
 - collaboration at the local level is less effective than desired at this initial stage, given that PC is new to local government authorities

- not all GWE publications intended for PCVs are being received
- the effectiveness of VBHWs as front-line health workers is limited by the lack of transport (bicycles)

5.10.4 Conclusions and Recommendations for Nigeria

1. Volunteers indicate that they are "somewhat" satisfied with their GWE assignment. Most would prefer a more integrated job description, to include other public health or rural development activities.

It is recommended that the job assignments of PCVs be reviewed to determine whether the addition of other activities is feasible or desirable.

2. GWE/PCVs in Nigeria have benefitted from excellent pre-service training in GWE. PCVs in other countries (e.g., Cameroon) are eager to receive similar training.

It is recommended that consideration be given to opening future GWE training events in Nigeria to volunteers in other countries.

It is further recommended that the possibility of volunteer exchanges on GWE be examined, so that training and experiences can be shared.

3. The high demand for curative care in Nigeria can work against the PCV's felt need to establish credibility as a spokesperson for GWE.

It is recommended that consideration be given to furnishing PCVs with the means for very simple medical intervention, provided local medical authorities agree on the principle and the therapy selected.

5.11 Togo

5.11.1 National GWE Plan

Togo has developed a national GWE plan calling for eradication by 1995. It relies on the basic strategies of health education, mobilization, filter distribution, safe water supply, and some treatment of water sources with temephos. An intersectoral committee, *Comité National d'Eradication de la Dracunculose*, has WHO, UNICEF, and the Peace Corps among its members. An updated plan of action for 1992 has been developed with the assistance of UNICEF. Rural water supply is assisted by UNICEF, the EC, and JICA.

5.11.2 Peace Corps Contribution

The Peace Corps has been involved in GWE since 1990 and presently has 22 volunteers as primary and three as secondary workers. In addition to health education, promotion, and filter distribution, the PCVs conduct surveillance in about 80 villages, or 13 percent of those still endemic. PC support will increase in mid-1992, when two graduates of the Tulane program arrive.

The PC/Togo GWEP is used as a programming model in "Programming Guide for Guinea Worm Eradication" (WASH).

5.11.3 Field-Level Assessment

1. The main achievements perceived by the field staff are:
 - the role of major partner in the national eradication program
 - undertaking village surveillance
 - developing a model PC/GWEP
 - focusing on training of teachers in GWE
2. Other achievements are:
 - developing an excellent form for village-based reporting (see Appendix I)
 - creating the training document "Community Education for GWE in Togo"
 - maintaining regular liaison with 131 villages/communities for GWE promotion
 - training 219 teachers and over 2,000 students in GWE methods
 - creating GWE committees in several communities
 - conducting annual IST sessions on GWE
 - programming the allocation of the entire \$20,000 in GWE country packet funds
 - training 230 community workers
3. Various field staff also mentioned the following constraints:
 - some GWE/PCVs work without a counterpart
 - difficulties in reaching less accessible villages
 - inadequate training in health education

- an inappropriate training cycle (as in neighboring Benin) which posts PCVs to their villages in the middle of the transmission season
- inadequate Peace Corps funds for rural water supply

5.11.4 Conclusions and Recommendations for Togo

1. PC/Togo has developed an excellent GWEP, but monitoring and evaluation are weak.

It is recommended that M&E planning and implementation be strengthened.

2. Volunteers would like to integrate W/S activities into their work assignment.

It is recommended that a training program for W/S be considered.

3. The timing of PST and the posting of PCVs in the middle of the transmission season diminish the effectiveness and job satisfaction of some GWE/PCVs.

It is recommended that the training of PCVs for whom GWE is the primary task be completed in September.

It is further recommended that PST for such volunteers include components in health (e.g., diarrheal diseases, nutrition, hygiene), water supply, and literacy.

Chapter 6

FINANCIAL ADMINISTRATION

6.1 Financial Resources

6.1.1 Overview

In 1989, the Africa Bureau approved a grant of \$500,000 from the Development Fund for Africa to the Peace Corps Guinea Worm Eradication Program (PC/GWEP), adding \$111,000 from Health Fund Reserves. Administrative responsibility for the grant was assigned to the A.I.D. Bureau for Science and Technology, Office of Health, Department of Communicable Diseases (S&T/H/CD), renamed the Bureau of Research and Development (R&D/H/CD) in 1992.

6.1.2 Initial Grant

The initial grant was distributed as follows (in \$000):

Peace Corps	441.0
WASH Project (for technical support to PC)	150.0
CDC/NCID support to PC	<u>20.0</u>
TOTAL	611.0

6.1.3 Grant Addenda

Added to the initial grant were \$75,000 from R&D/H/CD to WASH and \$200,000 that the Peace Corps negotiated through its existing Child Survival fund agreement with USAID, raising the total PC/GWEP budget to \$886,000 by its third year (Table 3).

Table 3

TOTAL GWEP FUNDS (IN \$000)

<i>Recipient</i>	<i>FY90</i>	<i>FY91</i>	<i>FY92</i>	<i>Total</i>
Peace Corps (from Africa Bureau/PPC)	441			441
Peace Corps (from R&D/H/CD, CS)		160	40	200
WASH (from Africa Bureau)	150			150
WASH (directly from R&D/H/CD)	75			75
CDC/NCID support to PC	20			20
TOTAL				886

6.2 Budget Components**6.2.1 Peace Corps/Washington**

A paper for the PC/GWEP prepared jointly by the Africa Regional Office and OTAPS in June 1989 proposed the following budget (in \$000):

1. Staff Travel and Per Diem	36.0
2. Technical Assistance	72.2
3. Technical Assistance (Global 2000)	16.0
4. Regional Workshops (3)	67.6
5. In-Service Training (12 events)	111.0
6. Educational Materials/Equipment	61.2
7. Technical Assistant's Salary	36.0
8. Peace Corps Indirect Cost (10%)	<u>41.0</u>
TOTAL	441.0

6.2.2 Peace Corps/Country Funds

The GWEP supplement of \$200,000 received in 1991-1992 was intended for distribution in packets of \$20,000 to the 10 participating Peace Corps country posts on request. (With the entry of Nigeria in 1991, the number of posts increased to 11.) These funds would be used to support community-level GWE activities following the model of the Peace Corps' Small Projects Assistance (SPA). Criteria for disbursement through 1992 were the following:

- The community, government, or NGOs must contribute at least 50 percent of the total cost of the activity.
- The beneficiary communities must have actual or suspected GWD cases.
- The activity must be scheduled for completion within six months of commencement.
- The maximum funding per activity is \$1,500.
- Funds could be used for:
 - repair, improvement, or maintenance of water sources
 - construction of new water sources
 - construction of latrines
 - development or reproduction of Guinea worm-related health education materials
 - holding local workshops
- The PCV, counterpart, and community representative must provide a description of the activity to the existing SPA selection committee for approval through the standard SPA mechanism. The committee ideally should include the GWE coordinator.

6.2.3 CDC/NCID

Travel and per diem for CDC/NCID consultants (in \$000) 20.0

6.2.4 WASH

Expenditures (in \$000) were:

1. Trainers for 3 Regional Workshops	60.0
2. Training Manuals	50.0
3. Monitoring System	30.0
4. Final Evaluation	50.0
5. Review of Local Workshops Design	10.0
6. Design/Program Development Assistance	<u>25.0</u>
	225.0

6.3 Utilization of Funds

A financial audit of the project is not within the scope of this evaluation. Data provided by available sources show the following obligations and expenditures of GWE funds by each participating organization.

6.3.1 Peace Corps/Washington

Expenditures planned or incurred by PC/W over the life of the program are shown below (in \$000). It should be noted that PC/W typically funds most travel for field personnel, workshop costs, some training events, and selected studies and surveys within countries.

	<i>Category</i>	<i>FY90</i>	<i>FY91</i>	<i>FY92 (projected)</i>	<i>Total</i>
1.	Salaries	20.1	17.2	28.0	65.3
2.	Meetings	5.0	1.1	1.5	7.6
3.	Workshops/ Training/ Evaluation	25.5	27.4	81.5	134.4
4.	GWE Newsletter/ Educational Materials	5.2	9.5	18.1	32.8
5.	Equipment/Supplies	8.0	6.1	—	14.1
6.	Travel	<u>77.4</u>	<u>51.0</u>	<u>58.4</u>	<u>186.8</u>
		141.2	112.3	187.5	441.0
	Anticipated distribution:	80.0	120.0	200.0	200.0

6.3.2 Country Funds (in packets of \$20,000 per country)

By mid-1992, country GWEP funds had been requested by seven Peace Corps posts and had been expended or appropriated as follows:

1991 -1992 funds		Activities
Benin	\$1,410	GWE Song Contest in Savalou, Zou
	\$1,149	GWE Song Contest in Djidja, Zou
	\$1,500	GWE Theater in Agbanizohoun
Ghana	\$10,000	GWE Village Volunteer Training (for 1992)
Mali	\$1,075	TOT Bandiagara
	\$2,948	Dogon language flipcharts
	\$263	Dogon GWE slide show
	\$1,500	TOT Douentza
	\$2,600	2 springs capped in Bandiagara
	\$2,767	2 well repair projects
	\$1,600	solar-powered health education equipment
Togo	\$260	Training of VHVs
	\$19,740	Training VHVs; 5 family latrines; 2 wells; training 106 primary school teachers; training village development committees.

1992 funds		Activities
Cameroon	\$3,600	GWE health education materials
	\$3,200	Training of trainers in GWE education
Mauritania		Disbursement to start in May 1992
Nigeria		Budget authorization just received

The four posts that had not requested country funds by early 1992 gave the following reasons:

Central African Republic	\$600 utilized for GWE survey; country likely to apply for WHO certification of eradication; therefore, no PC/GWEP has been developed.
Chad	Post in process of developing a PC/GWEP and expects to participate in program.
Côte d'Ivoire	Host country in process of developing GWE plan; therefore, no PC/GWEP to date.
Niger	PC participating in country-wide GWD prevalence survey and expects a GWE national plan to be completed by mid-year.

Several posts reported that some criteria for disbursement constrained the rapid utilization of SPA country funds. Those most frequently cited were the following:

- the requirement for a host country contribution of 50 percent is difficult in struggling economies
- procedures for review by the SPA committee are an administrative burden and cause delay
- projects like the construction of water points are not easily completed within the six-month limit
- the maximum PC contribution of \$1,500 often is too small and requires a search for complementary financing from other donors

6.3.3 CDC/NCID

<i>Activity</i>	<i>Funds (in \$000)</i>
Togo Consultant Travel (1991)	3.6
Staff Travel to Interagency Meetings	2.7
Benin Consultant Travel (1992)	<u>4.5</u>
	10.8

6.3.4 WASH

<i>Activity</i>	<i>Funds (in \$000)</i>
PC/GWEP Initial Planning and Ongoing Coordination	28.2
1989 Peace Corps/WASH Guinea Worm Eradication Program Planning Meeting	
1989 "Guinea Worm Eradication Program Paper"	
PC/GWEP Programming and Training Materials	55.5
1990 "Programming Guide for Guinea Worm Eradication"	
1991 "Orientation for Guinea Worm Disease: A Guide for Use in Pre-Service and In-Service Training"	
1991 "Teaching Guinea Worm Prevention in Secondary Schools: A Guide for Training Peace Corps Volunteer Teachers"	
PC/GWEP Start-up Workshop - Lomé	36.8
1990 Start-up Workshop, Lomé, January 22-26, 1990	
PC/GWEP TOT Workshop - Mali	23.0

1990	Training-of-Trainers Workshop, Peace Corps Guinea Worm Eradication Program-Mali	
PC/GWEP	Disease Monitoring Workshop - Cotonou	42.5
1991	Second Annual Guinea Worm Eradication Workshop, Cotonou, June 3-6, 1991.	
PC/GWEP	Evaluation and Workshop	39.0
1992	Workshop Report	
1992	Evaluation Report	—
TOTAL		225.0

6.4 Collaborative Contributions Financed with Non-PC/GWEP Funds

The intensity of resource mobilization for GWEP had a catalyzing effect on program participants. Many supported PC/GWEP with funds from related programs. For example, the Peace Corps programmed an additional \$40,000 from its Child Survival funds for GWE activities. Similarly, the Vector Biology and Control Project (VBC), which has collaborated with the Peace Corps since 1986, continued support from its own funds. WASH training materials and reports on GWE, developed before the start of PC/GWEP, were redistributed. Details of these collaborative GWE activities follow.

6.4.1 CDC/NCID

Date	Activities
1990-92	In-kind contribution by CDC: salaries of three consultants (approximate value: \$9,300)
1990-92	A host of additional efforts, including publication of "Guinea Worm Wrap-Up," technical consultancies, program reviews, etc.
1991	Training of five GWE/PCVs for Nigeria

6.4.2 Peace Corps (Total value approximately \$2 million + annually)

Date	Activities
1990-92	up to 44 PCVs full-time (\$30,000 per PCV per year) up to 24 PCVs part-time up to 11 APCDs expending varying levels of effort \$40,000 in Child Survival funds

6.4.3 VBC Project (Total value approximately \$200,000)

<i>Date</i>	<i>Activities</i>
1989	Support GWE in Cameroon
1990	Guinea Worm Information Network
1990-1992	PC Manual in English and French: "Community-based Initiatives to Eradicate Guinea Worm Disease"
1990	Coordination of "Assessment of Interagency Collaboration on Water/Sanitation and GWE Programs in Benin"
1992	Preparatory Workshops for the 4th Regional GWE Conference
1992	Facilitation of PC/GWEP Workshop in Mauritania

6.4.4 WASH (Total value approximately \$55,000)

<i>Date</i>	<i>Activities</i>
1988	Peace Corps Programming and Evaluation Workshop
1989	Peace Corps Water Supply and Sanitation Programming Workshop
1990-92	French Translation of "As the Worm Turns"

6.4.5 Other Donors

Major donors in addition to the participants mentioned above are African governments, USAID Missions, UNICEF, WHO, Global 2000, CARE, World Neighbors, OXFAM, and JICA. The synergy of talents and resources, both financial and in-kind, has greatly enhanced the contribution of the Peace Corps.

6.5 Financial Monitoring

USAID requires a quarterly accounting of funds granted to contracting or cooperating agencies. PC/GWEP funds were distributed to the Peace Corps, CDC, and WASH. Instead of a unified oversight of expenditures, disbursements were noted in the reports on existing projects to which PC/GWEP funds had been given. For example, CDC expenditures were reported as part of an existing CDC travel budget (PASA) funded by R&D/H/CD. But these reports did not identify the activities undertaken specifically for PC/GWEP. Indeed, the budget amendment that added \$20,000 for PC/GWEP gave no explanation of its intended use.

WASH received its PC/GWEP funds through the existing WASH structure, and expenditures, routinely included in its activity reports, were identifiable as part of the PC/GWEP only by task number and descriptor.

Unlike its partners, the Peace Corps had no reporting mechanism and USAID did not insist on one. Consequently, PC/GWEP activities, apart from the few under the Child Survival Project, were not reported to R&D/H/CD. However, like the other participants, the Peace Corps closely monitored expenditures internally, using its own system. It established a separate budget code in its financial management system, and W/S, OTAPS, the department in charge, created a computerized monitoring system for administrative ease (see Appendix J).

However, the Peace Corps has no reliable method of tracking GWE country packet expenditures used at the discretion of field posts. Typically, this information is submitted in response to a cable to all field offices toward the close of the financial year. A more regular and formal oversight by W/S, OTAPS would yield better management and utilization of these funds.

In sum, because of the piecemeal approach to financial monitoring and the fact that the quarterly reports to USAID do not always identify PC/GWEP activities, there is no clear picture of program expenditures.

6.6 Conclusions and Recommendations

1. PC/GWEP funds, as planned and utilized, led to the outputs expected. Specific observations follow.
 - The funding level has been appropriate to the start-up phase of the program, which saw a gradual expansion of activities country by country. Full operation of PC/GWEP in the 11 target countries would require a doubling of this level, not including any expanded water and sanitation activities.
 - The contributions of participating partners have greatly enhanced the effectiveness of PC/GWEP and should be encouraged.

It is recommended that future funding levels reflect the full operational needs of the main program, allowing a supplement for program additions (e.g., water supply).

It is further recommended that the Peace Corps continue to seek GWE partners from other agencies at both the central and country levels.
2. The absorption of PC/GWEP funds has been good overall. Variations among the participants have occurred because of planning delays or weaknesses.
 - Requirements for utilizing country packet funds have proved too stringent in some cases and have hampered disbursement.

- Absence of national GWE plans in some countries has stalled PC/GWEP activities and requests for funds.
- The specific purpose of PC/GWEP funds should be clearly stated in all financial documents (e.g., PASAs) to encourage their rapid use.

It is recommended that requirements for disbursing country packet funds be relaxed. The host country contribution should be reduced to a maximum of 25 percent in cash or kind and the PC contribution increased to \$3,000. In addition, a shorter time limit for GWEP project approval should be imposed on the SPA committee in each country.

Given the differing rates at which countries have absorbed GWEP country packet funds, *it is recommended* that flexible ceilings be placed on the size of country packets made available to posts that request them.

It is recommended that the Peace Corps press for the development of national GWE plans in countries without them.

It is recommended that all PC/GWEP participants be clearly informed of the total amounts and purpose of program funds put at their disposal.

3. All PC/GWEP participants have good internal systems for tracking expenditures but there are gaps in program monitoring overall. PC/W is poorly informed about the utilization of GWE country packet funds by field posts. A central mechanism within USAID for monitoring all PC/GWEP expenditures would strengthen program oversight.

It is recommended that quarterly reports identifying PC/GWEP activities be submitted to R&D/H/CD by all participating agencies and that—where such reports are made to different desks—duplicates be sent to a desk charged with overall PC/GWE program monitoring.

It is also recommended that W/S, OTAPS continue to use and improve its own computerized monitoring system in addition to the general PC administrative system.

It is also recommended that quarterly reporting on country-level GWE activities be instituted to permit regular and reliable monitoring of country funds by W/S, OTAPS.

Finally, *it is recommended* that the IPBS introduced by the Peace Corps be studied for possible adaptation to PC/GWEP monitoring requirements.

4. It is not uncommon for a multi-country program to devote a large share of resources to central-level planning and coordination in its initial phase. In later phases, country planning should become the focus.

It is recommended that PC/GWEP redirect its priorities toward strengthening country-level programming and implementation.

Chapter 7

GENERAL CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

The conclusions and recommendations listed here are the fruit of discussion with co-evaluators and with Peace Corps Volunteers (PCVs), Associate Peace Corps Directors (APCDs), and national government staff and GWE coordinators assembled in Nouakchott in May 1992 for the third annual Peace Corps GWEP workshop. Some observations go beyond the Peace Corps' role to the policies of governments and external cooperating agencies, since PC/GWEP tasks in many countries often overlap with the program designs of others. Observations on this collaboration are intended to improve the efficacy of the Peace Corps contribution wherever such improvement is feasible.

7.2 Overall Assessment

In its first three years, the PC/GWEP has reached most of its major objectives, except for country-level planning consultancies, information coordination and exchange, and systems for program monitoring and evaluation. It has surpassed its objectives for the number of participating countries and beneficiaries.

Its success in improving skills in planning, monitoring, and evaluation are more difficult to measure. The PC/GWEP is unusual for two reasons: (1) it must set overarching goals, objectives, targets, and management systems for 11 country-specific programs, then monitor and assess the results, within the Peace Corps' decentralized structure; (2) the Peace Corps exercises limited control over program planning because it collaborates with agencies and governments that often tend to incorporate PC activities into their own. If the PC/GWEP has helped to hone the Peace Corps' programming skills, it has done so despite this handicap. Programming must take place along with continuous negotiation with partners—at central and country levels—to ensure that Peace Corps program and management objectives are respected.

It is recommended that the Peace Corps organize a four-part re-programming exercise for the PC/GWEP based on the results of this evaluation: a general PC/W program review; a consultation with GWE focal points in each participating PC post; a central-level planning meeting with core program partners; and planning meetings as required with other cooperating agencies and governments.

Specific recommendations for each program component follow.

7.3 Management and Coordination

The PC/GWEP embraces activities carried out by PCVs in association with other governments or agencies. The resulting diversity—and uneven quality—among individual country programs require a good deal of monitoring from headquarters, at present most often undertaken indirectly through Peace Corps program planning and administrative instruments. W/S, OTAPS—the responsible management section—has insufficient knowledge of the content, targets, or progress of individual country programs and of the local management structures that have been put in place. Poor communication and information limit PC/W responsiveness to country-level planning and programming needs.

For PC/W, the following actions *are recommended*:

1. create a GWEP quarterly monitoring system to enable W/S, OTAPS to keep abreast of the content, targets, and progress of all country-level GWEP activities;
2. grant priority support and attention to GWEP management and administration at *country level*;
3. assign a program assistant full-time in W/S, OTAPS to support the administration and monitoring of the PC/GWEP throughout Africa.

As a multi-agency program, the PC/GWEP requires ongoing collaboration and communication among the partners at headquarters level, together with adequate oversight by the donor, USAID. Individual inputs of all partners have been relevant, of good quality, and usually timely. At the same time some product overlaps have been signaled by participating partners, who, an early planning document assumed, would come together at quarterly management and planning meetings that, for reasons not known to the evaluators, have never taken place. These partners have since expressed the need for a practical management working group. (Perhaps the quarterly interagency planning meetings were expected to fulfill this function, but their purpose, altogether different, is to further policy and information exchange.) To fill the management need, the following action *is recommended*:

4. schedule regular planning and coordination meetings for the core agencies participating in the PC/GWEP.

A corollary of improved collaboration is improved program oversight by USAID to replace the current piecemeal monitoring that reflects the administrative nature of the program as a collection of individual project buy-ins or grants. The following action *is recommended*:

5. all PC/GWEP core agencies should submit quarterly reports to R&D/Health that identify activities which are part of the program. If such reports are made to different desks, duplicates should be sent to a desk charged with overall PC/GWEP monitoring.

The decentralized nature of the Peace Corps—and consequently of the PC/GWEP—places considerable management responsibility on field offices. This includes advocacy for a national GWE plan, in-country programming, writing job descriptions for GWE/PCVs, organizing training for PCVs and nationals, ensuring collaboration with cooperating agencies on policy

and planning issues, and monitoring and supervision. Overall, country-level management has been of widely varying quality, clearly influenced by the knowledge, available time, and commitment of the APCD responsible for GWE. In some instances, this commitment has been so inadequate that W/S, OTAPS has been unable to determine who is in charge of GWE and, hence, to provide adequate support to the field. Elsewhere, APCDs are frustrated by an excessive workload. (APCD responses to the questionnaire indicated that each PCV in the program requires an average of two percent of APCD time.) The increasing numbers of PCVs entering the program with a background in public health, or GWE in particular, have demonstrated their management skills within government structures and could do so within the Peace Corps itself. In light of these observations, the following actions *are recommended*:

6. improve program management at field level and communication with PC/W by naming "GWE focal points" (usually the APCD for health or W/S) in each PC/GWEP country post and defining specific tasks for them;
7. ensure a reasonable allocation of APCD time between the PC/GWEP and country-specific program plans;
8. consider PC/GWEP management roles for PCVs in countries where PC need and PCV competence are matched;
9. institute a system of quarterly progress reports by GWE/PCVs to their respective "GWE focal points," timed to coincide with each post's quarterly GWEP report to W/S, OTAPS.

W/S, OTAPS has given greater weight to conferences and training than to such operational concerns as planning support and field-level interventions. This emphasis was justified in the first phase of the program, when training and orientation took precedence. Moreover, field-level expenditures were lower because of the staggered entry of country posts into the program, lag-time for program start-up once entry had occurred, and financing for GWE/PC activities by collaborating agencies (e.g., UNICEF, Global 2000). Absorption of country-packet funds was slow for these reasons and because of a \$1,500 limit on each activity and a 50 percent counterpart contribution. For future phases of the PC/GWEP, the following changes *are recommended*:

10. increase the limit of country-packet funds to \$3,000 per activity and reduce the counterpart contribution to 25 percent;
11. adjust the disbursement of country-packet funds to each post's capacity for absorption;
12. encourage greater use of country-packet funds in comparison with centrally programmed funds and increase financial support for water supply and sanitation activities.

7.4 Programming

The underlying rationale for the PC/GWEP is that GWE is an ideal PCV activity, requiring little technical expertise and promising visible results within the normal two-year PCV tour of duty.

While a very good case can be made for continuing PC involvement in GWE, this would require a change of programming assumptions. It was assumed that health education without other interventions would produce a significant reduction in GWD. However, experience in such countries as Benin indicates that health education alone is less effective than water supply alone, but that in combination they are much more effective. PCVs are aware of the limitations of health education as a sole intervention. Moreover, GWE health education activities have rarely occupied the PCV and the community beyond the transmission season, that is, for a few months once or twice a year. PCVs are often hampered by language difficulties in promoting health education, and in some countries have taken on the role as supervisors of local health promoters.

The evaluators have concluded that a narrow GWE health education focus is not advisable. Such added interventions as water supply, water catchment, or water treatment do require some technical expertise, but simple techniques are within the competence of many PCVs. In addition, volunteers have been successful in conducting, supervising, and organizing GWD surveillance; in monitoring the progress of national GWE plans; and in integrating GWE with other health-related activities. The timing of many tours does not permit PCVs to stay through two annual transmission seasons, as had been expected, and few of them are around to see the gains made in GWD reduction. Participation in activities other than health education would increase job satisfaction.

In addition to strengthening program *monitoring*, as suggested earlier, *field-level evaluation* will also permit changes in the direction of country programs. Thus far, W/S, OTAPS has conducted a rapid review of the programs in Mali and Cameroon, but no evaluations have been initiated in the field.

In light of the foregoing, the following actions *are recommended*:

13. develop an integrated strategy at each post, combining GWE-related tasks such as water supply, health management and surveillance, and general health education;
14. give greater attention to detailed country-level programming of PC/GWEP interventions, with appropriate job descriptions for the PCVs involved;
15. arrange the timing of PCV postings to allow volunteers to see the impact they have made on GWD;
16. provide more expert assistance to country posts for developing project plans, especially in new countries or in those with weak programs;
17. develop a program design appropriate for the PC/GWEP as a whole that also lays out general project goals for each country;

18. ensure that each country program reflects the collaborative nature of GWEP and that program planning is preceded by adequate discussions among the partners;
19. strengthen monitoring and evaluation in the PC/GWEP and especially in country-level plans.

7.5 Human Resources and Training

A well-planned program with clear objectives should be able to make full use of its human resources. As the PC/GWEP seeks to enlist the expertise of PCVs trained in health or science, it must offer them a challenge to match their abilities. Initially it emphasized the Peace Corps' unique person-to-person approach to development. But, as more highly skilled persons have entered the program, the managerial, and supervisory contributions of PCVs have grown steadily.

PCVs accept the challenge to eradicate a debilitating disease and are anxious to contribute their best to the cause. Although only half who responded to the questionnaire believe that success will be achieved in their countries by the target date of 1995, all believe in the value of the eradication effort. Many have requested better training, either in PST, IST, or in GWE programs in nearby countries, suggesting the inclusion of such topics as the sociocultural characteristics of target areas, health information systems, and surveillance techniques.

There is a general conviction that PC participation should be enlarged to include all volunteers working in areas where GWD is endemic. Program continuity must be preserved by the replacement of PCVs who leave, and sustainability ensured by assigning each PCV a counterpart who can be trained. At present, only half of PCVs work with counterparts.

The following actions *are recommended*:

20. encourage GWE training of host country nationals and working relations between PCVs and counterparts at national, district, and local levels;
21. train all PCVs in GW endemic areas in GWE techniques, regardless of their main assignment, and if necessary hold an IST for this purpose;
22. utilize trained PCVs in managerial and planning roles;
23. ensure the ongoing presence of a PCV in target communities until program objectives have been achieved;
24. have OTAPS review the quality and timing of GWE PST and IST, with a view to broadening GWE-related technical skills;
25. develop a solid country-level PC/GWEP strategy before recruiting additional PCVs for the program;

26. orient future regional Peace Corps GWE workshops toward the practical requirements of GWE programming, e.g., disease surveillance, appropriate technologies, and techniques to improve coordination or training.

7.6 Information, Education, and Communication

Health education, the cornerstone of the Peace Corps contribution to GWE, depends for its success on the diffusion of knowledge, the acceptance of its content, and a resulting change in behavior. The PC/GWEP's first target audience is the PCVs, the second, the program beneficiaries. The Peace Corps publication "As the Worm Turns" offers PCVs a forum for sharing information and experiences and is complemented by the more general status reports in "Guinea Worm Wrap-Up" published by CDC. "As the Worm Turns," the GWE publication most widely distributed to PCVs and country posts, could also serve the technical, operational, and programming functions of W/S, OTAPS. Its potential for passing on "how to" information about GWE methods, informing PC posts about available resources (e.g., country-packet funds), or aiding compliance with programming milestones has not been exploited. Similarly, available GWE health education materials are underutilized, and communication channels between the field and PC/W or within countries themselves are weak. Several actions *are recommended*:

27. use existing GWE education materials to the fullest and promote the exchange of educational, audiovisual, and programming materials among countries participating in the PC/GWEP;
28. introduce a simple, standardized health information reporting form to improve GWD surveillance and feedback on program impact;
29. encourage two-way communication between central health planners and village-level beneficiaries, especially for disease surveillance results;
30. increase PCV support to GWE education in schools.

7.7 Sectoral Inputs

Growing emphasis on an integrated approach to GWE has drawn attention to PC activities in related fields. To exploit this potential, the following actions *are recommended*:

Water Supply

31. the PC/GWEP should seek to incorporate health education in water supply projects undertaken by other donors and encourage the targeting of GW endemic areas for improved water supply;

32. PC should develop training modules in intermediate water supply technologies, e.g., improving water quality in open wells, simple water catchment systems, and hand dug wells;
33. encourage the use of country-packet funds for small-scale water supply projects.

Cloth Filter Distribution

34. PCVs should participate in cloth filter production, promotion, and distribution.

Social Mobilization

35. community-based social mobilization techniques should receive greater stress to maximize the impact of health education.

7.8 Logistics

Adequate transportation is a constant and legitimate concern of GWE/PCVs. As the target date for eradication draws near, volunteers have been urged to broaden the geographical scope of surveillance, health education, and filter distribution. A bicycle is not convenient for distances of more than 10 miles unless roads are unusually good. A motorbike offers more mobility but higher risk. Four-wheel vehicles are rare. Some countries (e.g., Nigeria and Mali) have recognized that the job requirements of volunteers warrant an exception to the policy favoring bicycles. Therefore, the following action is *recommended*:

36. in consultation with PC posts in participating countries, W/S, OTAPS should make a recommendation to PC/W about suitable transportation for GWE/PCVs;
37. sources of suitable transportation should be identified.

7.9 Future of the PC/GWEP

The momentum that the PC/GWEP has achieved over the past three years, the recent entry of three more countries into the program, and the accumulation of valuable knowledge and experience in GWE programming would alone justify its continuation. In addition, it has given the PC an opportunity to improve its own programming skills, and has provided evidence that the GWE programs of collaborating partners are relying on continued PC involvement.

Therefore, the following action is *recommended*:

38. continue the PC/GWEP at least through 1995, the target date for global eradication of GWD;
39. institutionalize the role of the VBC Project in the PC/GWEP by making it a funded partner.

Chapter 8

LESSONS LEARNED

1. The Peace Corps Guinea Worm Eradication Program stands in Peace Corps history as a unique exercise in advocacy at the highest levels. The entry of the Peace Corps into GWE is widely regarded as a watershed and the beginning of a global mobilization effort.
2. The community-based, person-to-person approach to health education can be effective in encouraging health-seeking behavior.
3. Significant reductions in the disease are most readily achieved through a combination of health education and safe water supply. Applied singly, these factors have less than half the impact they do when combined.
4. Multi-agency collaboration on a global program builds its own synergy and momentum, drawing on the strengths of all partners.
5. A program is most successful when its strategies are country-specific. At the same time, a careful balance must be struck between decentralization and diversity on the one hand and centralized monitoring and program support on the other.

Appendix A
SCOPE OF WORK

SCOPE OF WORK

EVALUATION OF THE PEACE CORPS GUINEA WORM PROGRAM

BACKGROUND

In 1989, the Peace Corps received a three year grant from the Africa bureau of AID to provide resources to Peace Corps staff and Volunteers to initiate and implement guinea worm eradication programs in up to ten African countries. Peace Corps' efforts in this area are part of a broader Guinea Worm eradication effort involving CDC, Global 2000, UNICEF, WHO, AID Missions, African governments and others. In addition to the financial support A.I.D. provided Peace Corps, it also provided technical assistance through the WASH and VBC projects. Prior WASH activities have included the design and implementation of two workshops and the development of various programming and training materials (see Field Reports 329, 320, 321, 296 and 313). The Peace Corps strategy for achieving its objectives included strengthening its capacity in collaboration, information management, programming, training and, monitoring. Peace Corps plans to continue its efforts at least through 1995 and has submitted a new funding request to A.I.D.

The purpose of this activity is, in conjunction with Peace Corps and AID, to carry out a formative evaluation of the Peace Corps Guinea Worm program. The evaluation will review how effective Peace Corps was in meeting its objectives including the quantifiable milestones proposed by Peace Corps at the beginning of the program. This activity will capture what lessons have been learned during the past two and one half years and provide recommendations on how Peace Corps can improve its program.

The above was discussed and reviewed at a planning meeting held at the Peace Corps office on January 8, 1992 with representatives from Peace Corps, WASH and AID. The following scope of work was developed during that meeting.

The specific tasks for the WASH consultants will be the following:

Phase I

1. Review Peace Corps Guinea Worm eradication proposal and evaluate Peace Corps success in meeting its stated quantifiable indicators for the program objectives of collaboration, information sharing, programming, training, and monitoring (i.e., number of volunteers trained, number of programs developed, number of training manuals developed, etc.). This activity should also include an attempt to document if the AID funds were spent according to proposed budget. It is not within the scope of this assignment to do an audit of the project. Phase I of this evaluation will be carried out in Washington D.C. reviewing Peace Corps/Washington files, interviewing key players in the Washington area (including current and former Peace Corps staff, AID, WASH, VBC and others), and doing phone interviews with key players outside of the Washington area (i.e. CDC and Global 2000).

2. Issues and questions that can not be answered in Washington will be identified and, in conjunction with Peace Corps, the consultant will develop a questionnaire for Peace Corps staff in the various African countries where the Guinea Worm program is being implemented. The questionnaire will be used in interviews by Peace Corps and A.I.D. staff traveling to selected countries as well as sent out in writing to the field.
3. In parallel with the above steps, Peace Corps will develop and mail a questionnaire for Peace Corps volunteers assigned to the G.W. program that will address local level impact of the program. The consultant/evaluator will not have a role in developing this questionnaire.

Phase II

4. A field trip will then be undertaken by Peace Corps and AID to gather additional information from the field including responses to the questionnaire that the evaluator has defined. The consultant/evaluator will not participate in the field trip.

Phase III

5. After the Peace Corps/AID team has returned from the field, the collected information will be handed over to the evaluator. The consultant will then take this additional information, the information being mailed in from the Peace Corps volunteers and the findings from his/her initial review (phase I) and prepare a draft evaluation/final report.
6. The consultant will then work with Peace Corps, AID and a facilitator to design and plan a regional workshop to be held in May/1992 in Mauritania. The workshop will be designed in such a way as to present appropriate draft evaluation findings to the workshop participants (Peace Corps/APCDs, Volunteers and host country counterparts) and get their feedback plus their additional information. It is expected that this process will result in workshop participants understanding what lessons have been learned to date and what actions they can do to improve their programs.
7. Participate in a TPM.*

Phase IV

8. The consultant will then go to Mauritania to help prepare for the workshop and then assist with the workshop. The consultant/evaluator will play a key role in the workshop sessions that deal with evaluation. A second consultant will be hired, by WASH, to be the lead facilitator of the workshop.

* Note: Peace Corps will use non-WASH funds to hire a second facilitator to co-facilitate the workshop.

Phase V

9. Based on the contributions of the workshop participants, the evaluator will finalize the evaluation/final report. A separate workshop/field report will be prepared by the lead facilitator.

PERSONNEL

The task will be carried out by two consultants.

The evaluation will be carried out by a social scientist with knowledge of Guinea Worm, experience in evaluations, bi-lingual (french speaking), knowledge of Peace Corps and AID and with good facilitation skills. Expected level of effort is 36 days.

The workshop facilitator must have strong facilitation skills and be bi-lingual (French). Expected level of effort is 20 days (including workshop planning and design work in the U.S.).

TENTATIVE SCHEDULE FOR THE EVALUATOR

Phase I will include 10 days of effort to be completed before Feb 28, 1992.

Phase II will be implemented by Peace Corps and AID staff from March 1-31.

Phase III (including workshop design planning and TPM) will include 7 days of effort to be completed between April 1 and April 15.

Phase IV will include 15 days of effort in Mauritania (and associated travel time) between May 3-17.

Phase V will include 4 days of effort between May 18 and May 30.

TENTATIVE SCHEDULE FOR THE FACILITATOR

TPM and workshop design between 10-15 April.

In-country preparation: 5-9 May.

Workshop: 10-15 May.

Debriefing and Report Writing: 18-22 May.

Appendix B

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- Yohalem, David, and Sarah Fry. 1991. *Teaching Guinea Worm Prevention in Secondary Schools: A Guide for Training Peace Corps Volunteer Teachers*. WASH Field Report No. 321. Arlington, Va: WASH Project.

Appendix C

LIST OF PERSONS CONTACTED

Agency for International Development

Dr. John Austin, R&D/H/CD
Mr. Arnold Baker, POL/PAR
Ms. Constance Collins, Africa Bureau
Mr. Lloyd Feinberg, R&D/H/CD
Mr. Jaime Henriquez, PVO Office
Dr. A. Dennis Long, R&D/H/CD
Dr. Helga Rippen, AAAS Fellow, R&D/H/CD
Dr. James Shepperd, R&D/H/CD

Centers for Disease Control

Dr. Jennifer Bryce, Evaluation Specialist, International Health
Dr. Stanley Foster, Director of Field Services, Program Office, International Health

Global 2000, The Carter Presidential Center

Dr. Andrew Agle, Director of Operations
Dr. Donald Hopkins, Senior Consultant
Dr. Craig Withers, Associate Director of Operations

National GWE Coordinators, etc. (Present at GWE Workshop, Mauritania)

Mr. Ibrahim Ibn Adamu, Community Dev. Officer, Slaga, Ghana
Mr. Koffi Edem Agbemavi, Health Education Coordinator, Ntose, Togo
Mr. Issa Degoga, National GWE Coordinator, Bamako, Mali
Dr. Diallo Yaya, Epidemiologist, WHO, Nouakchott, Mauritania
Dr. Gagde Hinn-Dandje, National GWE Coordinator, N'Djamena, Chad

Dr. Ibrahima Kane, Director of Hygiene and Health Protection, Nouakchott, Mauritania
Dr. Mohamed Salissou Kane, Director of Hygiene and Sanitation, Niamey, Niger
Dr. Sidi Mohammed, National GWE Corrdinator, Nouakchott, Mauritania
Mr. Ben Nwobi, GWE Zonal Facilitator, N.E., Nigeria
Dr. Lola K. Sadiq, National GWE Corrdinator, Nigeria
Mr. Antoine Sathé, Sr. Public Health Technician, CAR
Mr. Diakite Toumani, Acting Head of National Hygiene and Sanitation, Mauritania

Peace Corps/Washington

Mr. Pat Ahern, Inspector General's Office, Peace Corps
Dr. Joy Barrett, Water and Sanitation Specialist, OTAPS
Ms. Angela Churchill, Health Specialist, OTAPS
Mr. James Ekstrom, Director, OTAPS
Mr. Phil Bob Hellmich, Water and Sanitation Assistant, OTAPS
Mr. Ray Panczyk, Director of Program Support, OTAPS
Mr. Charles MacNamara, Budget Officer
Ms. Jacqueline Woodfork, CDA/BLN, Africa Region

Peace Corps/Field Office Staff (Present at GWE Workshop, Mauritania)

Mr. Sunday A. Alao, APCD/Health and Community Development, PC/Nigeria
Mr. Daniel Allen, PCV, PC/Mali
Mr. Roger C. d'Almeida, APCD/Education and W/S, PC/Benin
Mr. Benjamin K. Baah, APCD. PC/Ghana
Ms. Renée Bachler, PCV, PC/Nigeria
Mr. Tchao Bamazé, APCD, PC/Togo
Mr. David Boone, PCV, PC/Benin
Mr. Adam J. Dorr, PCV, PC/Mauritania
Mr. Timothy A. Drew, PCV, PC/Nigeria
Mr. Fritz Etienne, APCD/WRM, PC/Mali

Mr. Edwin D. Falconer, PCV, PC/Mauritania
Ms. Donna Feldkamp, PCV, PC/Mauritania
Mr. Lee Gillette, PCV, PC/Mauritania
Ms. Doris Hubble, PCV, PC/Ghana
Mr. Jon Janowicz, PCV, PC/Mauritania
Ms. Gillian E. Lyon, PCV, PC/Mauritania
Ms. Angela Martin, APCD/ Ag. and W/S, PC/Mauritania
Ms. Siobhan Murray, PCV, PC/Mauritania
Ms. Mary Pecaut, Country Director, PC/Mauritania
Ms. Jennifer Pelzner, PCV, PC/Mauritania
Mr. Tom Sheehan, PCV, PC/Mauritania
Ms. Tracy Allen, PCV, PC/Mauritania
Ms. Judith Waterman, PCV, PC/Mauritania
Ms. Susi Wyss, PCV, PC/CAR
Mr. Jonathan G. Young, PCV, PC/Mauritania

UNICEF

Ms. Katherine O'Neill, Asst. Project Officer, Dracunculiasis Eradication Programme
Dr. James Sherry, Senior Advisor, Programme Division

Vector Biology and Control Project (Medical Service Corporation International)

Dr. Pat Carners, SRP Project Director
Mr. William Hansen, Consultant/Workshop Facilitator
Dr. Flemming Heegaard, Institution/Human Resource Development Specialist
Ms. Kathleen Henry, Editor
Dr. Robert W. Lennox, VBC Project Director and Senior Vice President MSCI
Dr. Barry Silverman, Health/Management Information specialist

Water and Sanitation for Health Project

Ms. Sarah Fry, Health Consultant/Workshop Facilitator

Mr. Craig Hafner, Deputy Director

Ms. Ann Hirschey, Assistant Task Manager

Mr. Eduardo A. Perez, Associate Director for Engineering

Dr. May Yacoob, Social Scientist

WHO Collaborating Center for Research, Training, and Eradication of Dracunculiasis at the Centers for Disease Control

Dr. Robert L Kaiser, Director, Division of Parasitic Diseases, NCID

Ms. Beverly Mixon, Deputy Director of Management, NCID, Division of Parasitic Diseases

Ernesto Ruiz-Tiben, GWE Consultant, Global 2000 at the Division of Parasitic Diseases, NCID

Appendix D

**GUINEA WORM ERADICATION SURVEY
FOR PEACE CORPS VOLUNTEERS**

**GUINEA WORM ERADICATION SURVEY
FOR PEACE CORPS VOLUNTEERS**

Volunteer's Name: _____

Country: _____

District: _____

Resident Village: _____

ACTIVITIES

1. How long have you been a Peace Corps Volunteer in this country? Number of months _____
2. What is your primary job responsibility? _____
3. What is your secondary job responsibility? _____
4. How long have you been involved in Guinea worm activities at your present site? Number of months _____
5. Were there other PCVs carrying out Guinea worm eradication (GWE) activities at your site prior to your arrival?
 - a. Yes _____
 - b. No _____
6. Do you work with another development agency or group on a regular basis to implement your GWE activities?
 - a. Yes _____
 - b. No _____ (If No, please SKIP to question number 8)
7. With what type of agencies or projects do you collaborate on GWE (check both if appropriate):
 - a. Host Country Government _____ Which Ministry? _____
 - b. Other (e.g. UNICEF, Global 2000, CUSO, etc.) Please list these agencies by name: _____
8. Do you work with Host Country counterpart(s) on a regular basis to implement your GWE activities?
 - a. Yes _____
 - b. No _____
9. How effectively have GWE activities been coordinated at the local level?
 - a. Very effectively _____
 - b. Effectively _____
 - c. Not very effectively _____
10. Are you familiar with the National Plan to eradicate Guinea worm in your country?
 - a. Yes _____
 - b. No _____
 - c. Somewhat _____

11. How serious a health problem is Guinea worm in your community versus other health problems such as malaria, schisto, AIDS, etc?
- a. Very serious _____
 - b. Serious _____
 - c. Not very serious _____
- Comments: _____
12. With how many *communities* or *villages* do you work with regularly on GWE activities? _____
13. How many communities have a structure for health promotion (e.g. health committee, traditional healers' societies, etc.)? _____
- How many village health workers have been trained in your sites in GWE? _____
14. How would you describe the community response to GWE efforts?
- a. Very supportive _____
 - b. Supportive _____
 - c. Not very supportive _____
15. Do you work with schools on GW eradication activities?
- a. Yes _____
 - b. No _____ (If No, please SKIP to question number 19)
16. With how many schools do you work? Number of:
- a. Primary schools _____
 - b. Secondary schools _____
 - c. Other types of schools _____
17. How many teachers have been trained in GWE activities? _____
18. How many students have been trained in GWE activities? _____
19. How many filter cloths have been distributed in your area? _____
(If None, please SKIP to question number 21)
20. How many households are:
- a. residing in your area? _____
 - b. using filter cloths? _____
 - c. appearing to use filter cloths effectively? _____
21. Are any other filtering devices being used (e.g. women's head scarves, material remnants, sand, charcoal, etc.)? If so, please comment on their correct use (e.g. correct mesh size, filtering methods, etc.):

22. Please summarize in brief phrases the number and type of activities you have conducted, or participated in, to date at your site; for example: 3 health education sessions held with 3 women's groups-16 participants total; 2 three-day training sessions with village health committees-8 participants total; 200 filters distributed, 6 wells improved by adding a cement skirt, 3 new wells built, 5 posters developed.

MONITORING

23. What months are the active GW transmission season(s) in your community?

24. Was there a baseline survey that measured the prevalence of Guinea worm disease at your site(s)?

I. Site Name: _____
a. Yes _____ (Please give the date _____)
b. No _____

II. Site Name: _____
a. Yes _____ (Please give the date _____)
b. No _____

III. Site Name: _____
a. Yes _____ (Please give the date _____)
b. No _____

IV. Site Name: _____
a. Yes _____ (Please give the date _____)
b. No _____

V. Site Name: _____
a. Yes _____ (Please give the date _____)
b. No _____

25. If surveys were conducted, how many people in your site(s) had Guinea worm at that time? If no surveys were conducted, please estimate the number of people who had Guinea worms during the first GW transmission season you were at the site(s).

I. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

II. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

III. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

IV. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

V. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

26. Do you conduct, or participate in, regular counts to monitor the reduction of Guinea worm disease?

- a. Yes _____
- b. No _____

27. How many people *now* have Guinea worm disease in your site?

I. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

II. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

III. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

IV. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

V. Site Name: _____
a. Number of people with Guinea worm _____
b. Total Population of the survey area _____

TRAINING AND PROGRAM SUPPORT

28. Did you receive GWE training in:

- | | Yes | No |
|----------------|-------|-------|
| a. Pre-Service | _____ | _____ |
| b. In-Service | _____ | _____ |
| c. Other | _____ | _____ |

29. For how many days did you receive GWE training? _____

How effective was the training?

- a. Very effective _____
b. Effective _____
c. Not very effective _____

30. What GWE publications do you receive and how often? (e.g. "As the Worm Turns," "Guinea Worm Wrap Up," etc.).

Have you found "As the Worm Turns" helpful?

- a. Yes _____
b. No _____
c. Somewhat _____

Should it be continued?

- a. Yes _____
b. No _____

31. What GWE education materials have you used at your site(s)? Please list in order of usefulness.

32. For PCVs living in Benin, Cameroon, Ghana, Mali, Togo, and Mauritania, have you ever applied for money from the Guinea worm eradication Fund available at the Peace Corps office to implement any GWE activity?

- a. Yes _____
b. No _____

33. Please list the activities mentioned in question number 22 above which were financed by the GWE Fund.

34. How can Peace Corps provide better support to you and your counterpart(s) in your efforts to eradicate Guinea worm?

GENERAL IMPRESSIONS

35. Do you believe your efforts are leading to the eradication of Guinea worm disease in your site?
- a. Yes _____
 - b. No _____

Why or Why not?

36. Are you satisfied with working on Guinea worm eradication activities?
- a. Yes _____
 - b. No _____
 - c. Somewhat _____

If you like, please explain why or why not:

37. Describe any unexpected improvements or problems which have occurred in the villages or communities that could be attributed to the GWE effort (e.g., increase in crop production due to more people being able to work in the field, less money for food for families since money is being contributed to build new wells).

38. Additional comments (Please use other side, if necessary):

Appendix E

APCD QUESTIONNAIRE

PEACE CORPS GUINEA WORM ELIMINATION QUESTIONNAIRE FOR APCDs

Please read these three notes before you begin:

Note 1: In the questionnaire that follows "Guinea Worm Eradication (or Elimination)" (GWE) refers to ANY and ALL water supply, sanitation, health education, information, surveillance, and related activities undertaken in a GUINEA WORM ENDEMIC AREA.

Note 2: Whenever you see an asterisk () where a document or publication is mentioned, you should (a) find a copy of the document in question and (b) make sure it is brought or sent to the Mauritania GWE workshop, May 3-7. We shall arrange to photocopy the document at the workshop if you wish.

Note 3: Les francophones sont invités à répondre en français. (Nous nous excusons d'avoir posé les questions elles-mêmes de façon monolingue.)

Your Name: _____

Title: _____ Since: _____

Country: _____

Previous development position (if any): _____

Country: _____ Dates _____

Date on which you completed the questionnaire _____

Name of co-respondent (if applicable) _____

Title: _____ Since: _____

NATIONAL-LEVEL ACTIVITIES AND MANAGEMENT

1. Are you responsible for coordinating GWE activities for your Peace Corps post? Yes _____ No _____

If "Yes," since (date) _____

If "No," the APCD responsible is _____

and you are completing this questionnaire because _____

APCD/GWE Questionnaire

2. Please describe the GWE-related duties you perform. (List only general tasks but make your answer more specific than your job description, e.g. coordination meetings, site visits, etc.)
3. What other responsibilities are assigned to you (e.g. coordination of water and sanitation projects, coordination of child survival, etc.)?
4. When did Peace Corps begin GWE activities in the country in which you are posted? _____
5. (a) What percentage of your annual workload has been devoted to GWE activities in the past twelve months or since the beginning of your responsibility for GWE activities? _____%
- (b) How many work hours have you spent on GWE in the past month? _____
- (c) How many in the heaviest GWE activity month? _____ (hours)
- (d) Please give any comments or observations on your GWE level of effort.
6. (a) Does your host country government (HCG) have a national GWE plan?
Yes _____ No _____
- (b) If "No," does the HCG intend to develop one?
Yes _____ No _____ ? _____
- (c) To your knowledge does another planning document (e.g. plan of action, letter of agreement, etc.) exist which guides GWE activities in the absence of a formal national plan?
Yes _____ No _____ ? _____
- (d) If "Yes," to (c) please describe: _____

APCD/GWE Questionnaire

7. (a) Has your HCG created a national GWE coordinating committee?
Yes _____ No _____
- (b) If "Yes," is Peace Corps a member? Yes _____ No _____
- (c) If Peace Corps is not a member, please explain why _____
- (d) Who are the (other) members of the National GWE coordinating committee?

8. Has your HCG appointed a National GWE Coordinator? Yes _____ No _____
- If "Yes," give the coordinator's title _____
- and name _____

9. With which governmental and external cooperating agencies (NGOs, bilaterals, multilaterals) do you coordinate activities on the NATIONAL level?

Name of agency	Activity (e.g. planning, funding)
----------------	-----------------------------------

10. (a) Has your Peace Corps post developed a PROGRAM especially for GWE? (The term "program" used here is described in the Peace Corps Programming and Training System Manual.) Yes _____ No _____

*Give the title of the relevant document(s):

- (b) If "No," has your PC post developed a program that incorporates GWE activities? (e.g. water supply, sanitation, health education, etc.)

Yes _____ No _____

- (c) If "Yes," please describe :

*Give the title(s) of the relevant document(s):

- (d) If you answered "No," to both (a) and (b) would your PC post wish additional help in developing a GWE program? Yes _____ No _____

PLEASE ANSWER QUESTIONS 11-16 WHETHER OR NOT YOUR COUNTRY HAS A FORMAL GWE "PROGRAM."

11. (a) Have any ASSESSMENTS, problem analyses, or searches of Guinea worm infection been undertaken in your country since 1989?

Yes _____ No _____

*(b) If "Yes," please list the titles of any relevant documents, dates, and organizations (including PC) who were involved.

12. (a) Has your post developed any PLANS for GWE or GWE-related activities?

Yes _____ No _____

(b) Briefly describe the activities concerned.

*(c) List key documents relating to these plans (e.g. IAA, project plans, TAs, VAD, Volunteer Workplans, Project Agreements, etc.):

13. (a) Has your post organized any GWE training activities at national or regional levels (e.g PST,IST,TOT,etc.)?

Yes _____ No _____

(b) Please list these activities, dates, and location below:

Training activity	Date	Location
-------------------	------	----------

*(c) Any relevant documents? (Please list with dates) Yes _____ No _____

APCD/GWE Questionnaire

13, cont*(d) Any relevant educational or informational materials (in any language) developed in your country with PC support? Yes _____ No _____

Please List:

14. (a) How many volunteers have been trained in GWE in-country? _____

(b) How many government staff and/or counterparts? _____

(Note that community-level training is covered in a later section.)

15. Has a monitoring system been designed to permit management and supervision of GWE activities? (Please note that monitoring is a management tool, which differs from disease surveillance.)

Yes _____ No _____

If "Yes," please describe briefly (e.g. monitoring strategy, questionnaires, etc.)

16. Have any reviews or evaluations of GWE or GWE-related activities been carried out? Yes _____ No _____

Yes _____ No _____

If "Yes," please list any reviews or evaluations and their dates below:

17. Did your office receive any technical support or model programming materials for any of the activities mentioned in questions 11-16 above?

Yes _____ No _____

If "Yes," please name the source(s) of this support, e.g. Peace Corps, WASH, A.I.D. mission, UNICEF, Global 2000, etc: _____ and the activity(ies) concerned _____

APCD/GWE Questionnaire

18. (a) Did your PC post know about the \$20,000 per country available from the GWE Country Fund? Yes _____ No _____

(b) Did your PC post request this funding? Yes _____ No _____

(c) If "Yes," please describe how you utilized the GWE Fund:

	Amount	Activity
FY90		
FY91		
FY92		

19. Please describe below any funding which you received in addition to the GWE Fund above and which were used for Peace Corps GWE or GWE-related activities in your country. Please include other Peace Corps funds and grants from other sources. Make your answer as complete as possible:

	Amount	Activity	Source (PC, UNICEF, HCG, etc.)
FY90			
FY91			
FY92			

APCD/GWE Questionnaire

20. Is your PC office or are your GWE volunteers receiving cloth filter material from the Ministry of Health?

Yes _____ No _____

or from another source?

Yes _____ No _____

Please name the source _____

21. Please check items from the following list of technical, informational, audio-visual, and educational materials/periodicals which your office has received during the GWE program period. Also indicate whether you found the item useful.

Periodicals:

- a. "Guinea Worm Wrap Up" (Global 2000/CDC)
received not received very useful useful not very useful
- b. "As the Worm Turns" (W/S,OTAPS)
received not received very useful useful not very useful

Informational Papers:

- c. "Guinea Worm Disease: VBC Tropical Disease Paper No.4"
received not received very useful useful not very useful

Audio-Visual:

- d. "The Fiery Serpent"
received not received very useful useful not very useful
- e. "The Waters of Ayole"
received not received very useful useful not very useful

Reports:

- f. "Workshop on Guinea Worm Control at the Community Level: A Training Guide" (WASH)
received not received very useful useful not very useful
- g. "Adding Guinea Worm Components: Guidelines for Water and Sanitation Projects" (WASH)
received not received very useful useful not very useful

APCD/GWE Questionnaire

- h. "Guidelines for Implementation Planning for Guinea Worm Control Programs" (WASH)
received not received very useful useful not very useful
- i. "Peace Corps Programming and Evaluation Workshop, Accra, Ghana" (WASH)
received not received very useful useful not very useful
- j. "Programming Guide for Guinea Worm Eradication" (WASH)
received not received very useful useful not very useful
- k. "Orientation to Guinea Worm Disease: A Guide for Use in Pre-Service and In-Service Training" (WASH)
received not received very useful useful not very useful
- l. "Teaching Guinea Worm Prevention in Secondary Schools: A guide for Training Peace Corps Volunteer Teachers" (WASH)
received not received very useful useful not very useful
- m. "Peace Corps Guinea Worm Eradication Program Start-up Workshop" (WASH)
received not received very useful useful not very useful
- n. "Training of Trainers Workshop. Peace Corps Guinea Worm Eradication Program" (WASH)
received not received very useful useful not very useful
- o. "Guinea Worm Eradication Workshop Report" (WASH)
received not received very useful useful not very useful

Networks:

- p. Material from The Guinea Worm Information Network (VBC/WASH)
received not received very useful useful not very useful

Other

If you wish, please comment on your responses.

22. Please list any GWE publications or audio-visual materials -- in any language -- which have been developed in your country:

APCD/GWE Questionnaire

23. (a) The Peace Corps GWE program suggests that a PCV information coordinator for GWE activities be appointed in each country. Were you aware of this program element? Yes _____ No _____
- (b) Was an information coordinator appointed? Yes _____ No _____
- (c) If "Yes," please give the coordinator's name _____
- (d) and Position _____
24. (a) Should GWE activities continue in your country until the target date 1995?
Yes _____ No _____ Explain:
- (b) Do you believe that the eradication goal can be met by that date?
Yes _____ No _____ Explain:
25. What kind of additional assistance would you request to make GWE effective (e.g. from W/S, OTAPS, WASH, VBC, the local A.I.D, mission or other cooperating agencies UNICEF, WHO, CDC, etc.)?
26. Do you have further comments or suggestions concerning national-level planning, management, and program support?

COMMUNITY-LEVEL ACTIVITIES

Note: Some of the questions that follow request detailed responses. This information may be available from volunteers, and you are urged to consult them. If you must estimate your answers, please write "est." next to your response. Please leave the questions blank only where you are certain no data are available.

27. How many PCVs are working in your country at the present time? _____
29. How many volunteer positions were designated for GWE? _____
28. How many volunteers in your country are currently working in GWE activities?
- (a) As a first job responsibility: _____ (number)
- (b) As a second job responsibility: _____ (number)
- (c) As an add-on: _____ (number)
- (d) Total _____ (number)
29. How many volunteers engaged in GWE activities also work in:
- (a) health education: _____ (number)
- (b) rural development: _____ (number)
- (c) water and sanitation: _____ (number)
- (d) education: _____ (number)
- (e) other: _____ (number)
30. How many volunteers have received GWE training inside or outside your country between 1989 and now?
- pre-service _____ (number)
- training of trainers _____ (number)
- in-service _____ (number)
- annual GWE workshops _____ (number)

APCD/GWE Questionnaire

31. How many community-level workshops have been organized for GWE activities in your country? _____ (number)

How many HCN community workers (e.g. community health workers, rural development workers) have been trained? _____ (number)

How many communities have been educated in GWE? _____ (number)

32. In what sites have PCVs been working at GWE during the course of the program? (Please give any surveillance figures known)

<u>Village Name</u>	<u>Since</u>	<u>Until</u>	<u>GW Infection Rates</u> <u>Initial/ Ending Rates</u>	<u>Eradicated?</u>
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

33. (a) In how many PCV sites is regular GW surveillance carried out? _____ (number)

(b) Who is responsible for surveillance? (Give multiple answers if necessary.)

(c) In which sites do volunteers participate in surveillance? _____

Site	number PCVs
------	-------------

34. At how many sites have cloth filters been distributed? _____ (number)

35. If your GWE program includes well digging, well repair, well capping, pump installation, or water captation systems please give quantified outputs for the following activities carried out in Guinea worm endemic areas:

wells dug	_____ (number)
wells capped	_____ (number)
wells repaired	_____ (number)
pumps installed	_____ (number)
captation systems	_____ (number)

36. (a) To the best of your knowledge, how many primary students have been taught GWE methods? _____ (number)

(b) How many secondary students? _____ (number)

37. Are volunteers in your country coordinating their GWE-related activities with projects funded and/or managed at the COMMUNITY level by another agency/PVO?

Yes _____ No _____

Please list:

Name of agency	Site	Activity (well repair, surveillance, etc.)
----------------	------	--

APCD/GWE Questionnaire

38. Please comment on your perception of volunteer satisfaction with GWE activities:

(a) as a primary job responsibility

very satisfied _____

satisfied _____

not very satisfied _____

Comments:

(b) as a secondary job responsibility

very satisfied _____

satisfied _____

not very satisfied _____

Comments:

(c) as an add-on

very satisfied _____

satisfied _____

not very satisfied _____

Comments:

39. What have been the main accomplishments of Peace Corps GWE activities in your country?

40. What have been the main constraints to Peace Corps GWE activities in your country?

THANK YOU! PLEASE RETURN TO W/S, OTAPS BY MARCH 20, 1992. ©

Appendix F

TRIP REPORT

10 MARCH—4 APRIL, 1992
HELGA RIPPEN, USAID/W
JOY BARRETT, PEACE CORPS

Mauritania

10 March-13 March

Contacts:

Angela Martin—ACPD WS/S & AGR
Beate Pody—hired to help with Conference details
Dr. Sidi Mohamed—MSAS Coord. (Mauritanian official)
Dr. M, M. Petit—University de NKTT
Toumani Diakite—SNHA/MSAS Chef Service P.I.
Fall Moussa—SN-EPS Chef de P.I.
Dr. Diallo Yaya—OMS NKTT
Dr. Kelly Mafirou—MSAS Service Hygiene Scol

In transit: 10 Mar—11 Mar (arrived at midnight—delay secondary to sand storm)

Thursday 12 Mar:

Meeting with above contacts to discuss Regional and International Conference. Discussion of who to invite, how much support will Mauritania get for Nationals to attend, translation services.

Outcome:

- No money for Mauritanian nationals, pay for two (PC and counterpart) as with other countries
- Translation—from Senegal for approximately \$12,000 which includes equipment. Difficult since need clearance for 2 Senegal Nationals and person from Togo. Need official permission for Visas for the former. This will take time therefore required ACTION.

- Opening ceremony and protocol will be handled by Nouakchott

Visited facilities for conference:

Outcome:

- one large conference room that can be divided into two (partitioned)
- slide projector and overhead
- bar area can serve as sites for breakout sites
- opening session by pool, all events held at site
- copier available (broken at the moment)—but copies \$.30 a page

Friday 13 Mar:

Continued some discussions regarding workshop, located optional site for some of workshop—more traditional, talked with USPC—got message that Ghana cleared Helga Rippen's visit.

Outcome:

- no off-site workshop activities
- American Club arrangements for evening get together—alcohol served
- pins for participants have been made
- expeditors available from hotel, along with transportation

Saturday 14 Mar:

In transit to Nigeria. Left at 4:30 a.m., Stuck in Abidjan until 11:30 p.m.,

Nigeria

Sunday 15 Mar:

Arrived in Lagos at 2:30 a.m., slept at airport, left to National Airport at 6:30 a.m., arrived in Enugu at hotel by 3:00 p.m.

Met Jim Sherry from UNICEF

Monday 16 Mar:

Registration for conference; discussions with PC volunteers—differences between recorded/reported vs actual cases. (Volunteers from Cameroon and Ghana)

Joy & Angela Churchhill:

Steering Committee meeting;

Tuesday 17 Mar

Conference:

Minister of Health: Prof. Ransome-Kuti

Governor of Enugu State

Wednesday 18 Mar

Conference: Small group workshop,

Helga and Joy facilitated evaluation and WS&S respectively.

Thursday 19 Mar

Conference: morning

Bill Hansen: review of conference to help plan Mauritania workshop.

Friday 20 Mar

Site visit: Mike Finley (Country Director: Nigeria)

7 a.m.—5 p.m.

7 a.m.—12:00

Abakaliki: Office of LGA Director, Dr. Ekka Braid SE Regional GWE Coordinator;

Went with PCV Britt : Edda Community in Abakaliki for site visit.

12:00—5:00

Went with PCV Tim Drew and 3 Nigerian staff members :

Ezza LGA (local government area) to Amuzu Community, for filter use demonstration and filter distribution.

Saturday 21 Mar

6 a.m. left for Jos

1:00—3:00 p.m.—Went PCV Jeannine Fosca, Awe community. Picked up her counterpart and visited a community where health education work being performed. Surgical removal of GW in village.

7:30 p.m.—arrived in Jos

Sunday 22 Mar

in transit from Jos to Lagos

Monday 23 Mar

In transit from Lagos to Accra

Dinner at the home of PCD John Goldrick

Ghana

Tuesday 24 Mar

6:00 a.m. departure for Tamale

arrived in Tamale at 4:00 p.m.

Meet with PCV Dianne Wurster, Paul Block, head of Danish Bilharziasis Laboratory

Wednesday 25 Mar

7:15 a.m. departure

Went with Dianne Wurster, arrived at DBL at 7:40 a.m.

Tour of DBL; met with Ghanaian staff members, discussed DBL's involvement in the GWE program and research on intestinal worms.

8:30 a.m.—12:00—went with a Ghanaian engineer for infiltration gallery site visits (2 seen), in villages near Tamale (Northern Region).

12:00 p.m.—left for Salaga

2:00 p.m. arrived at Doris Hubble PCV's residence in Salaga for case study site visit. Met with her counterpart:

Larry Salam: East Gonja District GW Coordinator

Margaret Alidu: Doris' counterpart in community development

Ahmed Saole: Zonal Coordinator for Madelapo

Iddi Isac: Zonal Coordinator for Adamupe

Briefed on Adamupe as case study village (successful) and Madelapo (weak GWEP case).

Left for Adamupe, met village volunteer: Peter Nabaji who was interviewed.

Visited Chief, received presents from the Women's Village Committee; visited well sites for village.

6 p.m.—left for Tamale

Thursday, 26 Mar

7 a.m. departure for Accra

5:30 p.m. arrived in Accra

Friday, 27 Mar

8:00 a.m. debriefing with PCD John Goldrick

9:00 a.m. meeting with Dan Bloomhagen, HPN USAID

10:00 a.m. met with Ambassador Raymond Ewing

11:00 a.m. met with Pat O'Meara: Global 2000 Director, Ghana

1:30 p.m. call from PC/W

Saturday, 28 Mar

9:00 a.m. left for Cotonou

8:00 p.m. arrived in Cotonou—lost luggage

Benin

Sunday, 29 Mar

morning and afternoon free

7:30—9:30 p.m. dinner with PC staff

Monday, 30 Mar

8:00 a.m. meeting with PCD and APCD/Water-Sanitation

9:30 a.m. attempted meeting with National Director for Health Protection, Ministry of Public Health, Cotonou. Rescheduled for Tuesday a.m.

10:30 a.m.—meeting with the Director of Hydraulics, Ministry of Energy, Mines and Hydraulics, Cotonou

2:00 p.m. Meeting with Ambassador H. Isom

2:30 p.m.—meeting with Mrs. Mary Ann Cusack, USAID, Cotonou

4:00 p.m.—meeting with the Program Coordinator, UNICEF, Cotonou

Tuesday, Mar 31

8:30 a.m.—Meeting with National Director for Health Protection, Ministry of Public Health, Cotonou.

9:00 a.m.—departure for Bohicon

11:00 a.m.—Meeting with USAID water/sanitation Project Manager

1:15—3:00 lunch

3:00 p.m.—Visit to PCV Toni Eure and 9 animators; Project site visit in Passagon

5:30—7:00 p.m.—meeting with the GWE National Coordinator, the GWE Epidemiologist and UNICEF Program Assistant

evening: stay at Hotel Dako in Bohicon

Wednesday, April 1

7:30 a.m. Departure for Agouna to visit PCV Erika Tapman and animators in the GWE Project area in Agouna.

- Visited Agouna and listened to animator present GWE lesson using flip chart.
- Visited water supply: Maragot pump. Source was very muddy, not protected by a fence, filter in system that can remove Cyclops. This pump installed only several months ago.
- Looked at GW cases

- Looked at records obtained by animator and PCV.

Thursday, April 2

9:00 a.m. followup with PCD, Brad Favor and APCD Roger d'Alneida

- Clarification that PCVs work with UNICEF GWEP rather than USAID program except for the pump mechanic volunteer.
- Discussed interest of PC/B in working with USAID/B on future programs.
- PC/B expressed an interest in broadening the scope of GW PCV—e.g. health, water and sanitation, small business enterprise, community education, etc..
- Expressed need for better communication and activities between agencies. An example: GW PCV's provide UNICEF with monthly GW reports but there is inadequate communication to the GW PCV's regarding proposed pump or other UNICEF activities pertinent to their site.
- Discussed issue of free USAID project dispersement of filters while UNICEF and PC/B are selling them. It was believed that because of end of USAID project, filters are being dispersed free to reach target number set in project goals, contrary to prior practices.
- Emphasis on pumps—in training materials, animator flip charts, etc. discussed. This was related to broad health education issues.
- The role of animators vs community volunteers (UNICEF vs USAID project approach). Animators will begin to expand their activities to teach community volunteers to teach their own community.
- PC/B needs: expansion of GW scope to other sectors;
 - field support: monetary, materials, technical assistance.
 - programming: broaden expertise, preservice training and in service modules.
- USAID project recommendations:
 - expand training: pump mechanics, health workers
 - work with government to standardize portable water systems
 - integrate skill training into MOH, not just hydraulics.
 - could help with microenterprise: provide credit, improve machine shop capabilities
- VITA has 1993 proposed credit bank for small enterprise
- Discussed use of PC/B packets

- GW song contest: needed to tell how people get GW, how to combat the disease and what its effects are.
- theater on GWE : UNICEF supported 3/4ths of cost.

2:30 p.m. meeting with Ambassador Isom

- Summarized our findings from meetings with collaborating agencies and government officials and two day tour of GW PCV sites.
- Will provide her with a copy of this report at her request.

3:00 p.m. meeting with Mrs. Mary Ann Cusack, USAID, Cotonou

- Mrs. Cusack had just talked with Dr. Dennis Long, USAID/R&D/H/CD, and WASH regarding a request for a program assessment team. Given completion date of current water project, Mrs. Cusack expressed concern over delay of team arrival to late May given the deadline of new projects—June. Stresses that she will be leaving at the end of April and that there will be no replacement.
- Issue of free distribution of filters by USAID project brought up. It is recommended that the filters be given to Peace Corps or UNICEF to sell. This would prevent undermining filter sales by these organizations and will aid in the issue of sustainability. Mrs. Cusack will bring up this issue to PRAGMA.
- Joy Barrett to brief Dr. Long on Benin activities and need for immediate action.

7:00 p.m. cocktail at PCD Favor's residence

Friday, April 3

Cote d'Ivoire

2 p.m. Arrived in Abidjan. Went to Peace Corps office. met with CD Cynde Robinson and APCD Julie Burland. Discussed GWE in the country, the health program, and the new Urban Environmental Management (UEM) program. The UEM program has paired Volunteers and placed them in towns of approximately 10,000 inhabitants. One PCV is a technical person (e.g., architect, planner); the other PCV's responsibilities are in community mobilization. The UEM program is addressing issues of basic sanitation and solid waste.

Left Abidjan at 11 p.m.

In route to Washington, D.C.: Joy Barrett.

Appendix G

CASE STUDY FROM BENIN

GUINEA WORM CASE STUDY: THE COMMUNE OF AGOUNA REPUBLIC OF BENIN

Agouna is a commune of the Sub-prefecture of Djidja in the Zou province of Bénin. Situated on the Togo border, it is 61 km Northwest of the provincial capital Abomey.

The population of Agouna approximately 3 000 peoples consist of the ethnic groups Fon, Adja, Yoruba, haussa and Fulani. In this mostly agricultural region corn, groundnuts, cotton and yams are grown. The high agricultural productivity of the region makes it an integral part of the "Bread-basket" of Bénin. The majority of the income of the population comes from the sale of these agricultural products. During the dry season when there is little farming activity, commerce plays an important role in supplementing this income. The dry season is also the time of year when most of the traditional ceremonies and celebrations are held.

The majority of the population are animists the rest being either Muslim or Christian. Local beliefs hold that illness is a result of impure blood, deviant behavior or ill will cast by others (voodoo, joujou).

The health infrastructure of Agouna consists of a dispensary ran by a nurse, a mid-wife and a nurse's assistant. There are also traditional healers and midwives, though village Health committees do not yet exist.

The administrative seat of the commune, the village of Agouna, has two hand pumps which provide water for more than 1,000 people. Many families with tin roofs on their homes have built cisterns whereas the people in out-lying areas are obligated to get their water from streams and ponds.

A review of the situation in Agouna before the establishment of the program to eliminate guinea worm revealed that the commune had almost no sources of potable water and general sanitation was lacking. Most of the population was bed-ridden from 4-6 months of the year with Guinea Worm. During the dry season, when the transmission of Guinea Worm takes place, horrifying Guinea Worm infested wounds attested to the ferocity of the illness there.

In addition to this malaise, the population suffered from other illnesses such as malaria, diarrhea and intestinal disorders.

The lack of potable water in the vicinity forced the population to drink dirty water from shallow handing wells, ponds and streams. Some people were obliged to walk from 7-12 km to reach an over-crowded hand-pump where they are likely to wait several hours for one basin of water.

The national Guinea Worm Elimination program, which includes the Peace Corps, UNICEF, USAID and the Government of Bénin, then undertook to intervene in this hyperendemic area by posting a PCV there in January 1991. Their goal being to reduce the incidence of Guinea Worm by 90% by 1993 and 100% by 1995 of the 1989 level.

Since her arrival in Agouna, the Volunteer has recruited and trained a team of 6 local animators who promote Guinea Worm eradication in 41 villages. The six animators, chosen according to criteria stipulated by the project, then took part in a training session before intervening at the village level.

The principal activities of the animators have been:

- animation, sensitization, mobilization and organization of the local population around the theme of Guinea Worm eradication through clean water and sanitation. This was accomplished by the following:

- public demonstrations of filtration techniques
- home visits to council and treat the people with Guinea Worm
- monthly surveys
- Guinea Worm case studies
- sale of filter tissues
- follow-up surveys on the use and maintenance of the filters
- public presentations of Guinea Worm prevention techniques with flip-charts and short stories

The animators were given bicycles by the project and 500 F CFA for each presentation, the limit being 12 presentations per month.

The accomplishments of the Volunteer and her team at present are:

- 750 filters sold at 75 F CFA each with follow-up visits to assure proper use and maintenance
- Demonstrations and distribution of the Dakior solution
- 1008 monthly surveys
- 200 Guinea Worm prevention booklets distributed
- Guinea Worm prevention booklets distributed
- Guinea worm Song contest held with over 480 participants and 28 Guinea Worm prevention songs recorded for later play on the radio
- Village presentations made on the themes of village hygiene, personal hygiene and water sanitation
- Installation of 3 water pumps/filters at local ponds.

A comparison of the number of cases of Guinea Worm in 1989 and 1991 gives the following results for the 4 most endemic villages in the area covered by the Guinea worm team.

<i>Village</i>	<i>Pop. Tot.</i>	<i>Number of cases 1989</i>	<i>Number of cases 1991</i>
GANGAN	455	174	39
DENOU	187	120	12
KOUTAGBA	175	51	158
SANKPITI	266	91	1
	<hr/> 1083	<hr/> 436	<hr/> 210

The impact of these activities is readily apparent in terms of :

- utilization of filters by the majority of the population not having access to clean water
- better awareness of Guinea Worm in the villages
- better hygiene practiced in the villages
- mobilization of a large part of the population to address sanitation problems and social and economic needs.

These activities were not, however, without problems :

- villagers' demands of free filters
- lack of attendance at Guinea Worm presentations during the planting season
- the villagers grow tired of hearing about Guinea Worm
- lack of adequate transportation for Animators and Volunteers (bicycles, in some instances, are not sufficient)

It is previewed, according to the planned extension of the National project into all of the 3762 endemic villages of the country, to reach all of the remaining endemic villages and hamlets in the commune. Each village or hamlet will have a village Volunteer in residence. He/she will be chosen by the Animator in charge of his/her commune. The Volunteer will have to be able to read and write French. He/she will make two visits per moth to record the number of cases, sensitize the population, treat the cases of Guinea Worm and distribute filters and survey their use and maintenance.

The village Volunteer won't have a means of transportation provided by the project nor a salary. It remains to be studied what form of motivation will be provided.

The actual animators will supervise the village Volunteers, collect the village Guinea Worm booklets, fill out the communal Guinea Worm booklet and mobilize the village health committees when formed. He will receive a small indemnity of 1500 CFA per moth for 2 years and, in the long term, opportunities to take part in small income-generating and auto-promotion projects in the community.

Appendix H

TWO CASE STUDIES FROM GHANA

BACKGROUND INFORMATION

NORTHERN REGION

EAST GONJA DISTRICT

1970 to early 80s-Health information was being taught throughout the district. This included information with regard to guinea worm. Its presence was known, but was posing no major threat. It was located near the villages of Bau. Kokose, people were drinking water from the Tuluwe area--such as hunters and close-by villages. Because of travel movements it started to spread.

1982/83- The Northern Region experienced severe drought conditions and women were forced to start going long distances for their water. Places like Kpembe Dam, River Daka, Volta Lake. The water collecting method--walking into the water to fill the headpan--soon led to contaminated water in the new areas.

1984/86-By this time Salaga and the surrounding villages started experiencing guinea worm throughout.

1987- By this time the GW had spread throughout the Northern Region. East Gonja District was well on its way to having the second highest GW incidence in the Northern Region. Global 2000 entered the picture and started working with the MOH. A baseline survey was made which formed the basis for the present program. Through the MOH, the Environmental Health Staff started visiting the villages and promoting the use of filtering cloths. At the same time, the CDR Mass Education person was also moving in the villages to educate the people. Through inclusion of the local teachers, a survey team was formed to determine the extent of the disease.

1988-At this time, Chairman Rawlings lent his support by by visiting the E. Gonja District and encouraging the people to follow the recommendations about filtering/boiling the water. The first training program was launched at Yendi and district officers were established. Locally, one MOH employee and one CDR man was chosen to head the program. Because of the rapid spread of the disease, it was recognized that the program must expand. It was at this time that zones were laid out and coordinators were chosen (teachers, essemblymen) to administer them. It soon became apparent that one man for each zone was not adequate to keep up with the responsibilities and therefor, volunteers from each village were chosen. Some were chosen by the villages, and some by the Zonal Coordinators. A record keeping system was also established at this time.

1989 to present- A number of concerned groups have become involved in the solution to this disease, such as, Global 2000, GWSC, UNICEF, to name a few. There are certainly many others including the churches, MOH, & CDR. All groups as well as individuals are working each in their own way to to expand the educational program. There are some gains as well as some losses. But the fight is still on and little by little we will succeed.

INCIDENCE of GUINEA WORM INCREASE BY ZONE AND VILLAGE

		<u>DEC '91</u>	<u>JAN '92</u>	<u>FEB '92</u>	<u>Mar '92</u>
<u>ZONE</u>	Abrumase	149	70	no rpt	31
	<u>VILLAGE</u>				
	Abrumase	9	12	no rpt	6
	Akamade	4	13	"	4
	Jemtuto	13	14	"	6
	Kegbatito	7	11	"	5
	Kinjanega	3	12	no rpt	8
	Kabako	13	8	no rpt	no rpt
<u>ZONE</u>	Bau	13	22	38	33
	<u>VILLAGE</u>				
	Bau			7	4
	Kokose			9	8
	Kafaba	6			8
<u>ZONE</u>	Binjai	16	51	0	0
	<u>VILLAGE</u>				
	Binjai	3	25	0	0
	Kabache (Kabease)	5	10	0	0
<u>ZONE</u>	Ekudumpeno	rpt	18	19	-
					<i>SPREAD THRUOUT ZONE</i>
<u>ZONE</u>	Gbung	31	3	9	-
<u>ZONE</u>	Katigeli	213	no rpt	35	-
<u>ZONE</u>	Kitoe	102	99	89	
	<u>VILLAGE</u>				
	<i>KULUPE</i>				<i>39 (3 mo)</i>
	Kitoe	0	18	18	15
	Kofipe	21	15	15	
	Naamu	20	38	31	8
<u>ZONE</u>	Kpandi	44	35	10	
<u>ZONE</u>	Kpembe	17	31	35	
	<u>VILLAGE</u>				
	Kpembe	5	15	22	<i>10</i>
<u>ZONE</u>	Kpolo	16	16	14	
<u>ZONE</u>	Lamasa	0	<i>02</i>	<i>1919</i>	
	<u>VILLAGE</u>				
	Lamasa	0	<i>0</i>	<i>1911</i>	<i>6</i>

		<u>DEC '91</u>	<u>JAN '92</u>	<u>FEB '92</u>	<u>MAR '92</u>
<u>ZONE</u>	Masaka	7	91	15	37
	<u>VILLAGE</u>				
	Masaka	2	8	5	
	Kalande	2	13	11	13
<u>ZONE</u>	Salaga No.	5	12	20	14
	<u>SECTION</u>				
	Alhaji	0	2	10	
<u>STUDY VILLAGE</u>		<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992 (Jan/Feb/Mar)</u>
Matalapo)		48	27	37	16
5/PR190 {					14 (?)

CASE STUDY ADAMUPE EAST GONJA NORTHERN REGION

VILLAGE: Adamupe

POPULATION: 700/800

VILL. VOL. Peter Nabaji

Peter is a 1976 graduate of an Islamic Secondary school, where he received education in health, hygiene & biology.

After completing his education, Peter returned to Adamupe. He became involved in village politics, agriculture, health & education. Along with other health issues, he included guinea worm, but the need for emphasis did not exist at that time.

After the drought made itself felt by way of the influx of people from the distant villages and the ultimate lack of local water, Adamupe women were also forced to seek other water sources. They went to Kitoe and Kpembe dams. By this time, the water had become contaminated by the people who had come from the contaminated villages.

By 1984, guinea worm started appearing in the village. Peter started increasing his health talks, this time placing the emphasis on guinea worm prevention. The villagers would not accept the relationship of the water to the disease, feeling instead that it was in the air, blood, punishment from God and other means. Peter continued his campaign of teaching the boiling/filtering process. But even his wife did not listen and subsequently Peter himself got the disease. He had it when Chairman Rawlings came to Kitoe, he listened and determined more than ever to continue the education of Adamupe. He was finally able to convince them through perseverance in his teachings and finally by example that the water was the source of the disease. The Catholic church helped with a well and ultimately Global 2000 came with the filters. Boiling was done in the night so as to have cooled water the next day. District coordinators and health people were also invited to come and speak.

As a result, the village has been free of GW for 15 mos. The women and men carry clean water when they travel, they pass on the information when they go to market or other villages, & monitor the local water supply.

The women are determined to maintain their record. They are a well organized group that works in many ways to improve the village rather than individual families only.

Peter continues the GW eradication education, meeting and visiting at least twice a week thru various groups (literacy, comm. devel. womens). Checking to make sure there are no problems with the filters or the process.

CURRENT WATER

SUPPLY: One deep well, one shallow well, and one bore hole. Kitoe dam is near-by to be used in emergencies

All water is boiled or filtered no matter what it will be used for.

CASE STUDY MATALAPO EAST GONJA NORTHERN REGION

VILLAGE: Matalapo/Sipriso
POPULATION: 300/400
HOUSEHOLDS: 36
VILL. VOL: Shaibu Issahaku
G.W. DATA: 1989 1990 1991 1992(Jan/Mar)
48 27 37 16

Mr. Issahaku was chosen by the zonal coordinator as the village vol. He is the CDR sect. as well as a farmer. He has finished Jusec form 3. He is the son of the village leader.

It was stated that GW was noticed "one-one" for about 15 years until 1987. At that time, it was very wide-spread, but no records were kept at that time for verification. He states that he has attended 4 workshops over the last 4 years, but feels that they have not been sufficient.

His experience has been one of frustration. Meetings are attended sporadically, sometimes by the men, and sometimes by the women, but at no time does he feel that there is acceptance of his message.

We failed to determine the frequency of the meetings, except that he always had one after the workshops. He stated that the men do not believe the message and therefore do not pass the information to the women. The attitude is the same one of it being in the blood, punishment from God etc. However a few of the women do take the message seriously. The zonal coordinator also states that he has the same difficulties and states that "the people are not serious"

The ethnic group is Gonja. They seem not to be able to organize themselves into a functioning community group. The PCV had met with them a year ago, and after the meetings suggested that they organize and discuss alternative water sources and then visit the PCV. That has never been done. They seem to want someone to do it for them.

At the present time a woman has been chosen as an additional vill vol, but has not yet been in that position long enough to see any results.

WATER

SOURCES:

During the rainy season a rather large depression fills with water to the extent of overflowing and running to the River Daka. as the end of the rainy season approaches, the stream becomes "cut", the pond dries up.

During the dry season, water is collected from small pockets that have collected at the river side.

The ultimately go to Kpembe Dam until the onset of the rainy season again. All sources are prone to contamination.

CONCLUSIONS

GW eradication, to succeed, must provide more emphasis at the village level-on a continuing basis. We are still fighting superstition and disbelief. We must work to improve the effectiveness of the village volunteer. This can be done with more education of that volunteer. We must give ~~them~~ the tools of knowledge and self-confidence in their position. We are still trying to understand why some villages are successful and others are not. A recent study has revealed some interesting data regarding personality, position prior to being selected, ethnic background(some villages have more than one ethnic group) and credibility. Lack of sufficient transportation, prevents casual frequent visits to the distant villages. Lack of continuing education about GW is a problem. Lack of constant encouragement-through visits from the people at the district leve as well as material incentives (one T-shirt will not last the life-time of the program!). Lets work at providing transportation, funds for workshops, more incentives (both emotional and material). Whatever it takes to keep the level of enthusiam high for a sometimes thankless job is the responsibility of all organizations involved in the eradication of this disease.

Appendix I

PC/TOGO FIELD DOCUMENT

PEACE CORPS/TOGO

RAPPORT DE TOURNEE DE VISITE AUX VOLONTAIRES

- 1-Date de la visite: _____
- 2-Nom du (ou de la) volontaire visité(e): _____
- 3-Programme du (ou de la) volontaire: _____
- 4-Poste/Préfecture/Région d'affectation: _____
- 5-Objet de la visite:

6-Sites(villages,communautés)visités: _____

7-Personnes rencontrées(homologues, superviseurs, autres collaborateurs):

-
-
-
-
-

8-Activités en cours/Etat d'avancement du programme:

9-Problèmes soulevés/Problèmes identifiés:

10-Approches de solutions proposées:

11-Divers:

12-Recommandations:

Subdivision Sanitaire de _____

Equipe de la Zone de _____

RAPPORT TRIMESTRIEL DES ACTIVITES

1. - Nom du Volontaire: _____

- Noms des Homologues: a) _____

b) _____

c) _____

2. Brève introduction sur le rapport (en indiquant les principales activités entreprises et les villages touchés).

3. Liste des villages endémiques de votre zone

4. Surveillance épidémiologique

Liste des villages/fermes enquêtés (ou surveillés)	Evolution du nombre des cas			Observations/ Remarques
	Mois de:	Mois de:	Mois de:	

N.B. Il s'agit ici de la récapitulation des recensements mensuels effectués par le CVD ou les HFR/S.

5. Enquête CAP

A/- Nombre de personnes enquêtées: _____

- Lieu de l'enquête (liste des villages/fermes): _____

- Période de l'enquête: _____

- Noms des enquêteurs: _____

- Résultats des enquêtes:

Du nombre total des personnes enquêtées, indiquer le pourcentage de ceux qui: (voir variables correspondant aux chiffres 1, 2, 40 au verso).

Variables	%	Variables	%	Variables	%	Variables	%
1	!	11	!	21	!	31	!
2	!	12	!	22	!	32	!
3	!	13	!	23	!	33	!
4	!	14	!	24	!	34	!
5	!	15	!	25	!	35	!
6	!	16	!	26	!	36	!
7	!	17	!	27	!	37	!
8	!	18	!	28	!	38	!
9	!	19	!	29	!	39	!
10	!	20	!	30	!	40	!

5. B. Après les interviews des groupes focaux, pensez-vous que les communautés sont sensibilisées, ouvertes et mobilisées pour leur participation aux efforts à entreprendre pour l'élimination de la dracunculose de leur village? Justifiez votre réponse.

6. A- Activités de Mobilisation Communautaire et de formation réalisées
(voir activités possibles au verso)

Nature des activités réalisées	Fréquence/ Nombre	Villages/fermes bénéficiaires	Estimation Nombre de participants	Thèmes abordés

6. B- Divers commentaires; Problèmes rencontrés, etc.

6. C- Liste des activités de mobilisation communautaire et de formation

- Réunions publiques d'information et de sensibilisation
- Création/Redynamisation des CVD
- Organisation de sous-comités (ou commissions) Santé (composées d'Hommes et Femmes Responsables HFR/S)
- Formation des membres des CVD
- Formation des HFR/S
- Formation des Agents de Santé
- Formation des enseignants
- Réunion avec CVD et HFR/S
- Réunion avec enseignants
- Réunion avec Agents de Santé

7. C- Liste des activités d'EPS possibles

- Causerie éducative
- Visite à domicile
- Education pour la Santé à l'école
- Traitement des cas et conseils aux malades
- Observation/Education sur les points d'eau (sources)
- Observation/Education au champs
- etc.

8. C- Liste des micro-projets possibles

- Construction de citernes
- Aménagement de puits (nouveaux)
- Aménagement de puits (anciens)
- Aménagement d'une jetée sur retenue d'eau/rivière/marigot
- Réparation de pompe
- Fabrication/vente de filtres
- Production de matériel éducatif (flanellographe, affiche, etc.)
- Construction de latrines (familiale, publique)
- etc.

9. A- Activités/Projets secondaires

Nature de l'activité ou du projet secondaire	Etat d'avancement des travaux	Villages/Fermes bénéficiaires	Estimation/ Nombre des bénéficiaires	Observation/remarques diverses Source de financement

9. B- Commentaires divers; problèmes rencontrés, etc.

10. A. Autres activités non négligeables (voir liste au verso)

Nature de l'activité	Lieu	Date	Thème(s) abordé(s)	Observations

10. B. Commentaires

LISTE DES AUTRES ACTIVITES NON - NEGLIGEABLES

- Réunion mensuelle des agents de la santé de la Subdivision Sanitaire;
- Participation aux séminaires;
- Réunion de l'Equipe de zone;
- Réunion entre volontaires d'une même Subdivision Sanitaire/ou d'une même préfecture;
- Réunions intersectorielles (entre différents partenaires du PNA/ED) d'une même préfecture;
- Visites aux autres volontaires (ou aux autres équipes de zone).

11. Plan d'action pour le prochain trimestre

Activités programmées	Lieu (villages/fermes)	Ressources nécessaires		Calendrier d'exécution (indiquer la période ou les dates précises si possible)
		humaines	matérielles/ financières	

12. Conclusion du rapport (indiquer vos désespoirs et/ou vos espoirs sur le déroulement des activités courantes et sur les activités futures).

Appendix J

W/S, OTAPS FINANCIAL DOCUMENT

GWE BUDGET FY92 -- 02/04/92

GWE PASA BUDGET FY92: FEB. 4, 92					
ITEM	ALLOCATED	LIQUIDATED	OBLIGATED	PROJECTED	DEOBLIGATED
	\$322,356.00				
QUARTER ONE					
Togo TOT IST/TRF			\$8,300.00		
GWE Inter-Agency Meeting NY/Ray		\$184.00	\$184.00		
GWE Inter-Agency Meeting NY/Angela		\$137.50	\$137.50		
Print GWE Newsletter/French			\$86.78		
Print GWE Newsletter/English			\$116.72		
GWE Newsletter/Contract					
Annual Reports 1991/ Water & San. and AT			\$1,800.00		
QUARTER TWO					
Chad IST USPC *				\$5,700.00	
Chad PE USPC *				\$6,900.00	
Mali PD USPC *				\$8,300.00	
Mali IST USPC *				\$6,700.00	
GWE CONFERENCE Nigeria				\$15,000.00	
GWE Inter-Agency. Meeting /Ray			\$367.00		
GWE Inter-Agency Meeting/Joy			\$367.00		
IPBS Review/GWE Workshop Prep.				\$4,000.00	
GWE Newsletter/Contract & Printing				\$1,950.00	
Annual Reports 1991 Printing				\$3,200.00	
QUARTER THREE					
GWE Workshop Mauritania				\$80,000.00	
GWE Newsletter/Contract & Printing				\$1,950.00	

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GWE BUDGET FY92 -- 02/04/92

ITEM	ALLOCATED	LIQUIDATED	OBLIGATED	PROJECTED	DEOBLIGATED
QUARTER FOUR					
Mauritania IST USPC				\$7,500.00	
GWE Newsletter/Contract & Printing				\$1,950.00	
GWE Inter-Agency Meeting/Joy & Ray				\$500.00	
Nepal/Presenting Paper on GWE				\$5,000.00	
GWE COUNTRY FUNDS					
Benin (Reissue)			\$17,439.40		
Cameroon (Establish)			\$20,000.00		
Ghana (Reissue)			\$19,575.41		
Mali (Reissue)			\$12,742.52		
Mauritania (Establish)			\$20,000.00		
Nigeria (Establish)				\$20,000.00	
Togo (Reissue)			\$19,740.00		
SALARY AND BENEFITS					
Salary through 01/22/92			\$5,365.76		
Salary through remaining FY92				\$16,768.00	
Benefits through 01/22/92			\$1,416.08		
Benefits through remaining FY92				\$4,424.20	
GRAND TOTALS:	\$322,356.00	\$321.50	\$127,638.17	\$189,842.20	
Balance [Allocated minus (Obligated plus Projected)]:	\$4,875.63				
* This event will probably be postponed to a later quarter or will be cancelled.					

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Appendix K

**CASES AND NUMBER OF VILLAGES
WITH ENDEMIC DRACUNCULIASIS**

CASES AND NUMBER OF VILLAGES WITH ENDEMIC DRACUNCULIASIS IN AFRICA AND ASIA, DURING 1980, 1990, AND 1991.

COUNTRY	1980	1990		1991	
	CASES REPORTED	CASES REPORTED	ENDEMIC VILLAGES	CASES REPORTED	ENDEMIC VILLAGES
BENIN		37,414**	3,762	4,006*	3,762
BURKINA FASO	2,620*	42,187**	2,621		2,621
CAMEROON		742*	86	393*	81
CAR		10*			
CHAD					
COTE D'IVOIRE	6,712*	1,360*		20,064**	560
ETHIOPIA					
GHANA	2,703*	123,793**	5,111	66,697+	3,718
KENYA		6*			
MALI	816*	884*		13,793**	1,009
MAURITANIA	651*	8,036**	511		511
NIGER	1,906*			31,676**	1,510
NIGERIA	1,693*	394,732**	5,270	281,937**	4,908
SENEGAL		38*		1,686**	68
SUDAN					
TOGO	1,748*	3,042		5,118**	584
UGANDA		4,704		120,259**	1,736
TOTAL: AFRICA	19,299	616,948	17,361	545,629	21,068

INDIA	2,279*	4,798**	897	2,185**	576
PAKISTAN		160*	56	106*	36
TOTAL: ASIA	2,279	4,958	953	2,291	612

TOTAL: WORLD	21,578	621,906	18,314	547,920	21,680
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* Passive surveillance and/or area limited search.

** Nationwide village-by-village case search. Numbers of cases in 1991 in Nigeria and Uganda are provisional.

+ Monthly village-based reporting.

Source: Center for Disease Control. "Guinea Worm: The Final Four Years."