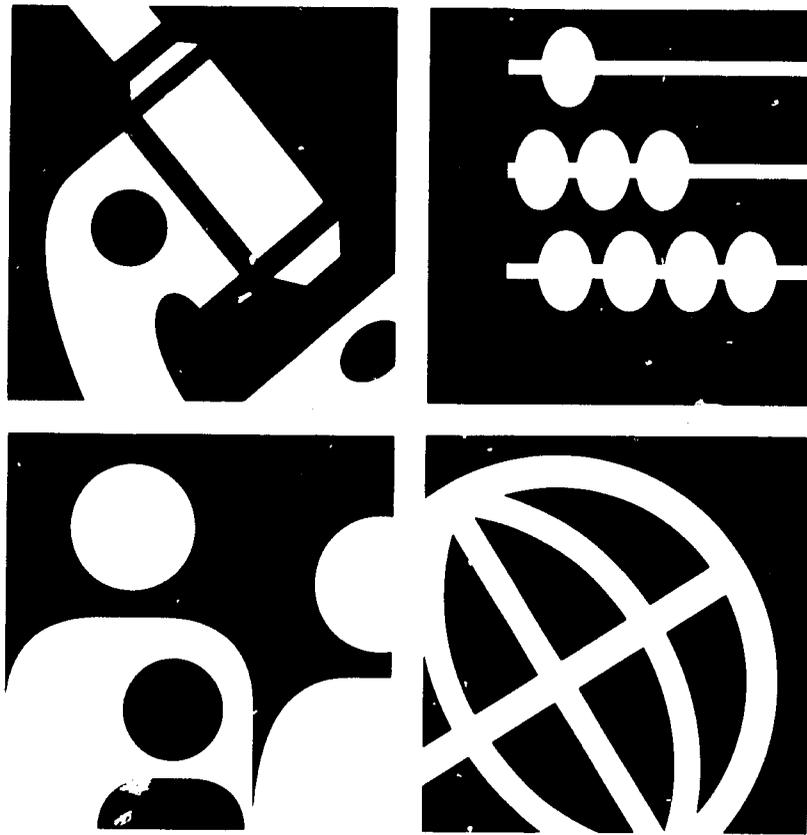


VECTOR BIOLOGY AND CONTROL PROJECT



1992 WORK PLAN

Managed by Medical Service Corporation International
Sponsored by the Agency for International Development

PD-ABD-730
ISA 75647

Vector Biology and Control Project

1992 Work Plan

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1. Introduction

"Malaria, the forgotten killer, must be remembered." — Child Survival and AIDS in Sub-Saharan Africa: Findings and Recommendations of the Presidential Mission to Africa, 1991.

Reporting on their fact-finding mission to seven African countries, the U.S. Secretary for Health and Human Services and the Administrator of the U.S. Agency for International Development (A.I.D.) identified malaria as the "foremost health challenge in Africa." They called for intensified U.S. assistance toward combating the disease and recommended helping African countries "develop more integrated approaches" to applied research and malaria control programs.

This report to the President was the first of several studies released in 1991 to sound an alarm about the growing problem of malaria. Reports by the Institute of Medicine (IOM) and the American Association for the Advancement of Science (AAAS) note that with the spread of drug and insecticide resistance, malaria transmission is outpacing control efforts not only in Africa, but in most parts of the developing world.

All of these reports paint a gloomy picture of malaria's resurgence and the dwindling arsenal of tools to control the disease. But they also signal a renewed interest in malaria and other vector-borne diseases among donors and host-country governments. After many years of waning support, the development community is recognizing that vector-borne disease control must be an essential part of efforts to improve the quality of life in poor tropical countries.

Another promising trend is a new emphasis on environmental health, which puts malaria and other vector-borne diseases in a context that encourages more integrated approaches to control. By classifying vector-borne disease as an environmental health problem, A.I.D. has taken an important step toward addressing the critical connections between disease control and development.

This surge of international interest in both malaria and environmental health supports the direction taken by the Vector Biology and Control (VBC) Project at the beginning of VBC II and offers exciting opportunities to forge new alliances for improving vector-borne disease control. A centrally funded project of the Bureau for Research and Development, Office of Health (R&D/H), VBC is A.I.D.'s primary resource for helping developing countries combat malaria and other vector-borne diseases. Since 1985, Medical Service Corporation International (MSCI) and its subcontractors, Harvard and Tulane Universities and the Henry M. Jackson Foundation, have provided technical assistance, training and information services to governments and institutions in 40 countries.

The VBC work plan for 1992 builds on the progress the Project has made in field testing new approaches to disease control and encouraging intersectoral collaboration to address malaria and other environmental health problems. The plan described below is also an invitation to A.I.D. Missions and Bureaus, host-country institutions and international agencies to join VBC in seeking sustainable strategies for controlling vector-borne diseases.

Spotlight on Malaria

Commissioned by A.I.D.'s Office of Health, the U.S. Army Medical Research and Development Command, and the National Institute of Allergy and Infectious Diseases of the National Institutes of Health, the IOM study warns that "the outlook for malaria control is grim." Citing inadequate funding and the lack of trained personnel in malaria-endemic countries, the report calls for a balanced agenda of malaria research and control.¹

The link between malaria transmission and the environment is an important theme of the study AAAS conducted for A.I.D.'s Africa Bureau. This study calls for an intersectoral approach to malaria control that would draw on the skills of entomologists, anthropolo-

¹Institute of Medicine (1991). *Malaria: Obstacles and Opportunities*. Washington, DC: National Academy Press.

gists, engineers, agricultural specialists and economists, as well as epidemiologists and parasitologists. It gives examples of intersectoral collaboration in Africa, and makes recommendations for strengthening and expanding these efforts through training and policy dialogue. The AAAS report also recommends that international donors and host-country governments build prevention and control measures into project planning requirements to help contain malaria transmission associated with development efforts.²

Although the AAAS report addresses the problem of malaria in Africa, many of its recommendations are relevant for control efforts in other regions. Together, the approaches recommended by the IOM and AAAS studies can provide a basis for a sound, multifaceted approach to malaria prevention and control.

Vector-Borne Disease and Environmental Change

Malaria's connection with the environment was recognized long before the mosquito's role in transmitting the disease. The Greek physician Hippocrates noted that fevers were common among people living near standing bodies of water. The Romans drained swamps to reduce fever. During the 14th and 15th centuries, Spanish kings restricted and later banned all rice cultivation because it was believed to cause deadly fever epidemics. The word malaria itself comes from *mal'aria*, or "bad air," a 17th century Italian description of the association between stagnant water and fever.

During the last half of this century, an emphasis on technological solutions has often obscured the importance of the link between disease transmission and the environment. But increasing concern about the environment and awareness of the need for more sustainable approaches to disease control are beginning to converge, pointing the way toward a more comprehensive approach to controlling malaria and other vector-borne diseases.

²AAAS (1991). *Malaria and Development in Africa: A Cross-Sectoral Approach*. Washington, DC: American Association for the Advancement of Science.

Such an approach is becoming increasingly important because of development's contribution to vector-borne disease transmission. Much of the resurgence in malaria, for example, is the result of planned and unplanned changes in the environment that create mosquito breeding sites and bring people with little or no immunity into endemic areas. Changes caused by migration and by development activities such as forestry, mining, road-building and irrigation have led to increased malaria transmission in many parts of the world.

Just as development can inadvertently exacerbate vector-borne disease transmission, the illness, disability and premature death caused by these diseases can hamper efforts to improve the economies of nations and families. Under the rubric of environmental health, development and health specialists can work together to build disease prevention measures into project plans and to carry out control programs that will protect the health of workers and their families.

Work Plan Highlights

The VBC Project's agenda for emphasizes environmental activities, human resource development, working with PVOs to develop sustainable health service delivery systems, research on removing some of the obstacles to effective malaria control in Africa, collaborative dengue prevention and control efforts in the Americas, and the economics of vector-borne disease and disease control. Highlights of the plan are described below.

Environmental Initiative

The influence of ecological factors on vector-borne disease transmission and the potential impact of vector control measures on the environment have long been subjects of VBC activities. In the VBC work plan for 1992, however, even greater attention is focused on environmental activities. Twelve activities with a total budget of \$556,278 will be carried out, funded through a special R&D/H allocation.

Many of the activities in this Environmental Initiative are designed to explore the relationships between development projects and vector-borne disease transmission and to encourage disease prevention through intersectoral planning and resource sharing. VBC will work with the Panel of Experts on Environmental Management for Vector Control (PEEM)³ on a number of these activities, with each group providing technical expertise and preliminary funding to help leverage additional support from other donors. For example, VBC and PEEM will work with the West Africa Rice Development Association (WARDA) and national health and rice research institutions in WARDA's member states to study methods of managing rice ecosystems to control disease vectors (pp. 93-94). Once specific research proposals on rice ecosystem management have been developed, support will be sought from other donors.

Other VBC-PEEM activities include establishing national databases to monitor the impact of water resource development on health (pp. 103-104); developing a computer model for integrated river basin development (pp. 97-98), preparing a manual on environmental management for disease control (pp. 95-96), and conducting a pilot project to incorporate environmental health data into a geographic information system (GIS) for monitoring river basin development (p. 99-100). VBC will continue to sponsor workshops to facilitate intersectoral collaboration, especially between agriculture and public health authorities and agencies.

Protecting the environment by testing alternatives to insecticides and monitoring the safety of insecticide application when alternatives are not available remains an important part of VBC's environmental agenda. In 1992, the Project will continue several studies on alternative vector control methods, including biological control of the mosquitoes that transmit dengue (pp. 85-86) and housing improvement for Chagas' disease control (pp. 157-58). VBC will also organize a series of workshops to determine whether a large-scale A.I.D. investment in insecticide-impregnated bed nets would be

³a joint agency of WHO, the Food and Agriculture Organization, the United Nations Environmental Programme and the U.N. Commission on Human Settlement

6

justified (pp. 51-52) and develop a database on the insecticides used in control programs to facilitate environmental assessments and ensure that A.I.D.-sponsored programs use appropriate USEPA-registered compounds (pp. 89-90).

Human Resource Development

At the beginning of 1991, VBC began producing a comprehensive training module to address one of the main obstacles to sustainable malaria control: the lack of trained personnel. During the past year, reports by the IOM and AAAS have emphasized the need for training. The difficulty of developing more effective malaria control strategies, the IOM report noted, is compounded by "a worldwide decline in the pool of scientists and health professionals capable of conducting field research and organizing and managing malaria control programs." The VBC training module will include units on program planning, collection of planning data, curative services, preventive services and surveillance. Each unit will emphasize training of trainers to ensure sustainability.

Starting in May 1992, VBC plans to test its malaria training module in countries in Africa, Latin America and Asia. Before then, the Project will develop an assessment instrument that will be used to determine a country's training needs and to adapt the training module to meet those needs (pp. 65-66). VBC will invest \$100,000 of its core funds to adapt and field test the module (pp. 71-72). After modification of the module units based on field test results, the training module will be available for operational use. VBC staff would welcome opportunities to discuss with interested Missions the resource requirements for making the training program operational in a host-country setting.

Ivermectin Delivery Program

Onchocerciasis is a serious cause of disability and blindness, affecting an estimated 17.5 million people in Africa and Latin America. With support from A.I.D. and other donors, the WHO/World Bank/UNDP Onchocerciasis Control Program (OCP) has helped farmers and herders in West Africa reclaim their land and livelihoods by controlling the black flies that transmit the disease. The OCP's efforts during the past 15 years have been successful, but they only protected 10 percent of the people affected by onchocerciasis. Future strategies will rely on drugs that prevent blindness rather than insecticides to kill black flies.

In 1992, VBC will continue to provide technical assistance and coordination for the Ivermectin Delivery Program (IDP) under a special allocation from R&D/H. The Project will work with PVOs and host-country institutions in five countries to develop and analyze strategies for delivering ivermectin, a highly effective anti-onchocerciasis drug, to people in endemic villages (pp. 59-60, pp. 135-36). It is hoped that the lessons learned from this three-year pilot program will identify cost-effective mechanisms for delivering ivermectin and other health services to some of the least-served regions of the world.

Economic Studies

Malaria is one of the leading causes of illness and premature death in the world, yet little is known about its economic impact. In a study published in the September 1991 issue of *Tropical Medicine and Hygiene*, researchers from VBC subcontractor Harvard University analyzed data from published and unpublished documents to assess the direct and indirect costs of malaria in sub-Saharan Africa. They found that the average cost of treating one case of malaria in sub-Saharan Africa was \$3.40, equal to the entire per capita health budget of many African countries.

In 1992, VBC will continue this effort to gain a better understanding of the economic impact of vector-borne diseases and provide policy makers with the information they need to set priorities for public health spending. Under a buy-in from USAID/-Lilongwe, VBC will help the Ministry of Health assess the impact of malaria on health care costs and economic productivity (p. 162). A VBC team will also analyze the treatment costs resulting from dengue hemorrhagic fever outbreaks among children in an Asian country to assess the potential savings from a dengue prevention program (pp. 75-76).

VBC hopes to conduct two additional economic studies that could have important implications for investments in child survival and public health in Africa and Asia. A protocol has been prepared for a 12-month longitudinal study to determine whether better case management can reduce the economic losses caused by malaria in African countries (p. 144). VBC would welcome an opportunity to discuss a cost-sharing arrangement to initiate this study. The Project also hopes to work with governmental and research institutions in Papua New Guinea to develop a research proposal for economic impact studies of malaria (p. 139).

The economic impact of vector-borne diseases has been a neglected topic until recently, but even less is known about the cost-effectiveness of various control measures. In 1992, if funding becomes available, VBC would like to develop methodologies for assessing the costs of various vector control measures used in Latin America (p. 140). These methodologies would allow planners to identify the most cost-effective control methods for their programs.

Regional Priorities

Africa

The number of malaria cases and deaths have been rising steadily during the past decade in many countries in sub-Saharan Africa, the region where at least 80 percent of all malaria infections occur. Malaria is the leading cause of childhood deaths in many African countries, killing an estimated 1 million children in sub-Saharan Africa every year. Other vector-borne diseases continue to threaten the health and productivity of people in the region: onchocerciasis, Guinea worm disease, schistosomiasis and yellow fever.

The inability of African nations to make substantial gains in the battle against these ancient diseases is partially a matter of insufficient resources. But a lack of accurate information, focused strategies and trained personnel make it difficult to apply even the limited resources at hand. VBC is committing a significant portion of its resources and time in 1992 to helping African governments and institutions come to grips with some of the most difficult problems in vector-borne disease control. The activities selected are intended to have applicability throughout the sub-Saharan region.

VBC's activities in Africa will include:

- o monitoring drug delivery systems to identify cost-effective alternatives (pp. 59-60, pp. 135-36);
- o field testing a training module to improve the technical and management skills of malaria control personnel (pp. 71-72);
- o working with host-country personnel to develop a national malaria control plan and attract donor support (pp. 113-114);
- o developing community-based systems for the elimination of Guinea worm disease from endemic villages (pp. 77-78);
- o evaluating the use of a computer model as a planning tool for predicting and minimizing the negative effects of river basin development on health (pp. 97-98);

- o field testing KAP and economic assessment instruments to more accurately estimate educational and intervention needs at the community level (pp. 162-63).

Latin America and the Caribbean (LAC)

Serious vector-borne disease problems are diminishing hard-won economic development gains in many Latin American and Caribbean countries. Rapid urbanization, expanding agriculture, and the exploitation of mineral and forestry resources exacerbate transmission of dengue and malaria throughout the region by providing breeding areas for vectors and encouraging the work force to live closer to endemic centers of disease. Because of this clear association between the spread of disease and environmental change, greater emphasis must be placed on understanding the socio-economic factors that promote transmission and developing multi-sectoral approaches to vector-borne disease control. In 1992, VBC activities will emphasize multisectoral collaboration between national agencies in LAC countries and coordination with other donor and technical agencies (PAHO, CDC, PEEM) working in the region.

Dengue and dengue hemorrhagic fever (DHF) have emerged as a major threat to the health of rapidly urbanizing populations of Latin America and the Caribbean. Epidemics during the past decade have extended from Mexico to Paraguay, with frequent DHF outbreaks and increasing endemicity in many areas. In 1992, VBC will continue to stimulate coordinated prevention and control measures with CDC and PAHO. Joint activities are planned to:

- o use a computerized geographical information system (GIS) to examine risk factors and improve control measures (pp. 105-106, pp. 127-28);
- o work with PAHO and CDC to develop a common database on national resources and policies to combat dengue, problems and technical assistance needs (pp. 87-88);

- o collaborate with PAHO and CDC to emphasize prevention through development of surveillance systems, health education, and community participation to reduce mosquito breeding sites pp. 87-88); and
- o work with PEEM to establish a community participation program to reduce dengue vectors in the eastern Caribbean (pp. 101-102).

Malaria remains the most widespread endemic vector-borne disease in the Americas. Although all affected countries have malaria control programs, many lack clear objectives and the technical and management skills needed to sustain control. The Project hopes to work with a LAC Mission and host-country counterparts to field test the VBC malaria training module, which includes units on program planning and management, epidemiological and entomological surveillance, case management, vector control measures and program evaluation. VBC is also seeking funding to translate the module into Spanish (p. 141).

Other VBC initiatives to combat malaria in the Americas include:

- o testing new serological methods for improved field diagnosis without microscopic analysis (pp. 83-84);
- o cosponsoring with PEEM a regional workshop in Honduras in May to explore the potential for collaboration with agricultural extension services to prevent and control vector-borne diseases (pp. 91-92);
- o providing technical and facilitation services for the WHO/-PAHO Regional Malaria Conference to be held in Brasilia in April 1992, which will focus on the socio-economic and multisectoral aspects of malaria and its control (pp. 49-50).

If funds become available, cost comparisons of dengue and malaria control methods will be made in selected countries as a means of developing multisectoral approaches (p. 140).

The VBC Project will continue to provide technical assistance to the Mission-sponsored Chagas' disease control program in Bolivia, which is a component of the USAID/La Paz child survival (Community and Child Health) program (pp. 154-61). A technical review later in 1992 will assess the cost-effectiveness of this pilot project's community-based housing improvements for vector control, epidemiological and entomological surveillance, and activities designed to assess and contain congenital and blood transfusion transmission.

Asia

Malaria and dengue hemorrhagic fever (DHF) continue to cause severe morbidity and mortality, primarily in children, in Cambodia, Indonesia, Thailand and other Asian countries. Increased urbanization and new land use create the ecological and human behavioral changes that lead to extremely efficient transmission of these diseases by vector mosquitoes. Current agricultural and water development practices also enhance the transmission of schistosomiasis and Japanese encephalitis in Asia.

In the past, comprehensive insecticide spray programs against mosquito vectors also controlled the sand flies that transmit leishmaniasis in India and Nepal. Movement away from these campaigns, however, has allowed the reestablishment of sand fly populations. Nepal and India are now experiencing the worst epidemic of visceral leishmaniasis since the late 1970s, when an estimated 20,000 people died of the disease.

Donors and national governments in Asia are disinclined to continue or reinstate large-scale insecticide spray campaigns to control mosquito-borne disease and are seeking alternative measures to address these costly public health problems. VBC will continue to assist them in implementing possible alternatives, including environmental management of water resources and agricultural practices, community involvement in source reduction, and prevention/control of vector-borne disease outbreaks through rapid decision making based on appropriate information systems.

Activities planned to provide this assistance include:

- o field testing a comprehensive training-of-trainers malaria control module (pp. 65-66, 71-72) in an Asian country;
- o providing training in leishmaniasis control in Nepal (pp. 55-56), as well as strengthening other training activities at the Hetauda Research and Training Center (p. 170);
- o working with PEEM on activities to assess the potential for disease control through environmental management of water resources and agricultural practices in several Asian countries (pp. 95-98, 103-104);
- o facilitating informed decision making in Pakistan and Nepal through operations research and HIS/MIS (pp. 57-58, 123-24, 151-53); and
- o analyzing the mortality and treatment costs associated with dengue hemorrhagic fever outbreaks in an Asian country (pp. 75-76).

Near East

Schistosomiasis in North Africa, drug-resistant malaria and leishmaniasis in the Gulf, and persistent onchocerciasis in Yemen are the most serious vector-borne disease problems in the Near East region. Migration and urbanization are increasing the vulnerability of people in the Near East to diseases common in urban and peri-urban areas, such as filariasis and leishmaniasis.

VBC and PEEM will collaborate on integrating health data into the Moroccan geographical information system (GIS) (pp. 99-100). VBC has not planned other activities in the Near East for 1992, but if additional funds were made available, the Project could assist in developing a leishmaniasis training course and in conducting operations research on recent diagnostic assays for malaria, filariasis and leishmaniasis.

Eastern Europe

The vector-borne diseases of Eastern Europe are ecologically similar to those found in eastern North America. Tick-borne illnesses (Lyme disease and tick-borne encephalitis), tularemia, and Hantaan and related viruses are of public health concern. Bulgaria has recently reported malaria resurgence.

Eastern European ministries and health institutes have traditionally been active participants in international research efforts and have had good success in controlling vector-borne diseases in their own countries. Probably the most severe constraint to vector-borne disease control in the region has been a lack of access to state-of-the-art diagnostic and treatment technologies. VBC has not allocated 1992 core funds for Eastern Europe due to the more urgent needs in other regions. If additional funds were made available, however, VBC could provide in-country training in modern immunological techniques for diagnosing vector-borne diseases in the region and in more efficient methods of field surveillance and control.

2. Summary of the 1992 Plan

The 1992 work plan is a combination of work in progress, proactive ideas from the VBC staff and subcontractors, assistance requested by A.I.D. Missions and Bureaus, and activities to perform the essential management, planning and liaison functions required by the contract. The VBC team and R&D/H staff have worked together to develop this plan, which is supported by a combination of core funding, special allocations from A.I.D. Bureaus through R&D/H (OYB transfers) and buy-ins from Missions and Bureaus that total \$4.339 million.

In the following chapters, VBC's 1992 budget is broken down into the six categories listed below. Activity sheets that describe the objectives, schedule, type of personnel required and preliminary budget for each activity are provided in chapters 3-8.

Life-of Project Activities

This category includes the 21 essential planning, management, liaison, outreach, coordination and information dissemination activities necessary to support field work and achieve VBC objectives during the life of the Project.

Mission and Bureau Requests

The seven activities in this category were developed in response to Mission and Bureau requests, but will be funded through VBC core funds. Core money has also been reserved to enable the Project to respond to future requests.

Proactive Activities

This category includes 21 activities initiated by the VBC staff and the Project's subcontractors.

Continuing Activities

The 13 activities in this category were initiated in 1991 and will continue during 1992.

Activities Awaiting Funding

Activities that VBC will begin in 1992 if funding becomes available are listed under this category.

Requirements Contract

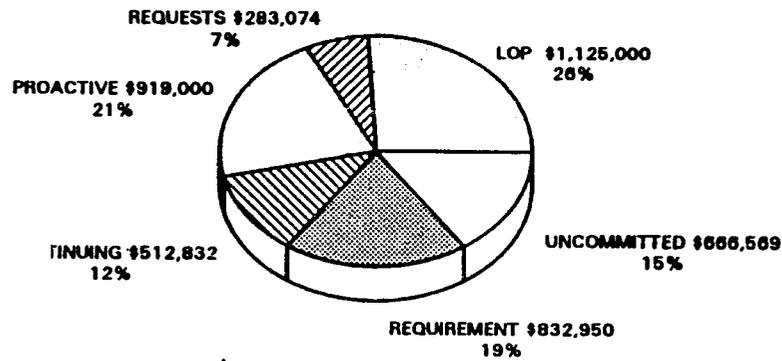
The 20 activities in this category were requested by Missions and Bureaus but will be funded through "buy-ins" to the Project's separate requirements contract.

1992 Budget Summary

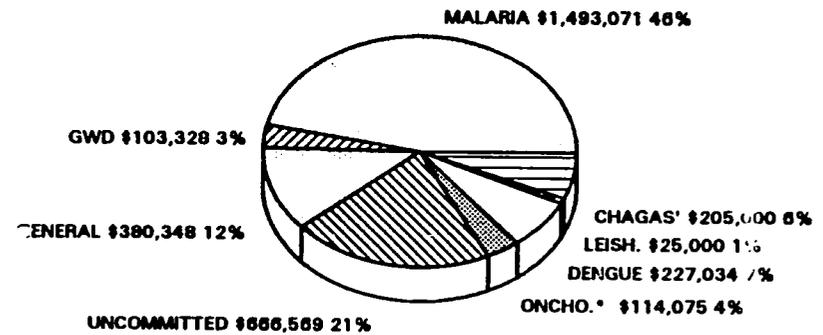
Budget Category	Budget \$
Life-of-Project	1,125,000
Mission and Bureau Requests	
Core Activities	253,074
IDP Activities	30,000
Subtotal	283,074
Proactive	
Core Activities	437,000
Environmental Activities	482,000
Subtotal	919,000
Continuing	
Core Activities	354,479
Environmental Activities	74,278
IDP Activities	84,075
Subtotal	512,832
Requirements Contract	832,950
Uncommitted	
Core Activities	285,000
Environmental Activities	381,569
Subtotal	666,569
Total Work Plan Budget	4,339,425

1992 BUDGET SUMMARY

SUMMARY OF 1992 ACTIVITY BUDGET BY CATEGORY



SUMMARY OF 1992 ACTIVITY BUDGET BY DISEASE



*TOTAL IDP

3. Life-of-Project Activities

A total of \$1.125 million has been budgeted for 21 life-of-project (LOP) activities, which include activity planning, administration and essential liaison activities with A.I.D. and collaborators.

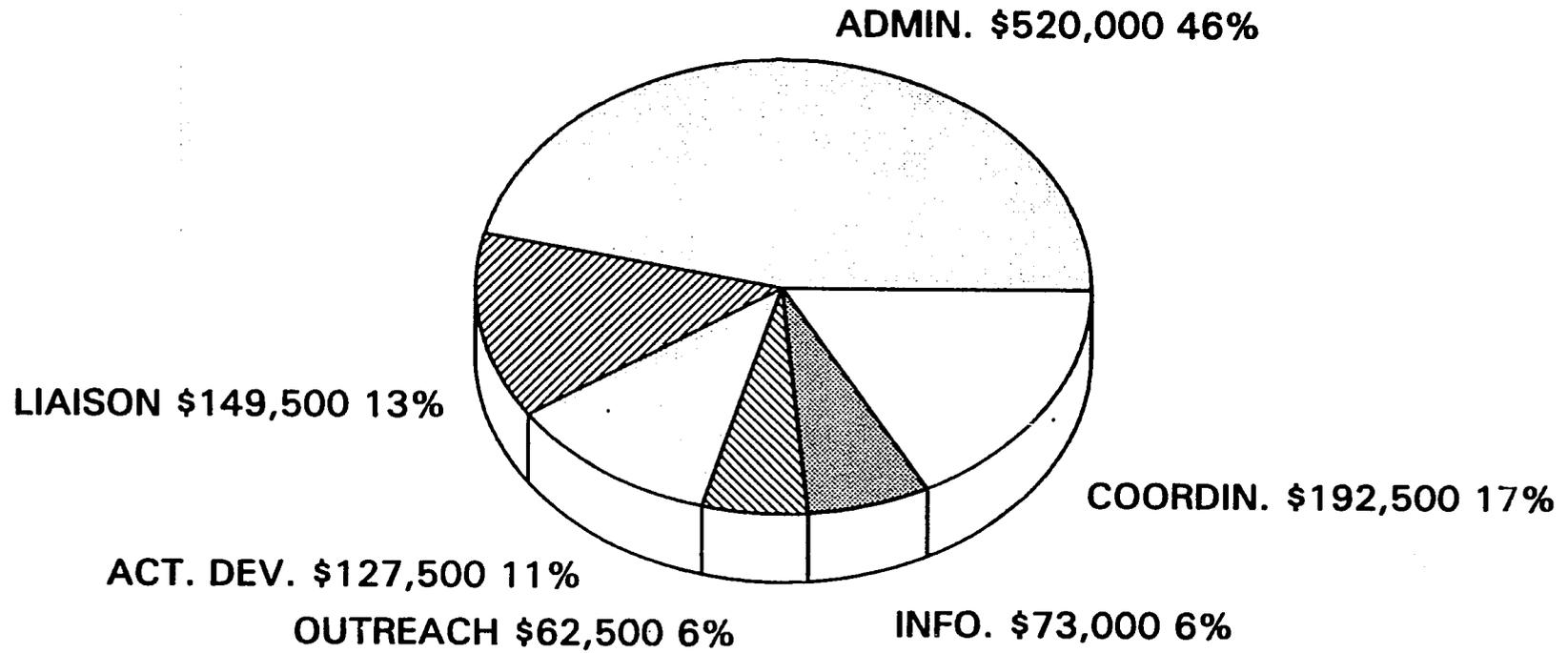
Life-of-Project Budget

Code #	Title	Budget \$
Administration		
301	General Administration/Office Management	390,000
302	General Technical Services and Preplanning	70,000
303	Computer Systems Maintenance	60,000
	Subtotal	520,000
Liaison Activities		
304	Liaison with R&D/H, Including Project Reporting	72,500
305	Liaison with Missions and Bureaus for Africa Region	12,000
306	Liaison with Missions and Bureaus for Latin America and the Caribbean Region	12,000
307	Liaison with Missions and Bureaus of Europe and Near East Regions	5,000
308	Liaison with Non-Regional Bureaus of A.I.D. other than R&D/H	5,000
309	Liaison with Centers for Disease Control	8,000
310	Liaison with World Health Organization	15,000
311	Liaison with Other Non-A.I.D. Agencies	15,000
312	Liaison with Missions and Bureaus for Asia Region	5,000
	Subtotal	149,500

20

Code	Title	Budget \$
Activity Development		
313	Core Contract Activity Development	97,500
314	Requirements Contract Activity Development	30,000
	Subtotal	127,500
Outreach and Professional Activities		
315	VBC Intern Program	27,500
316	Professional Development/Seminars/Outreach	35,000
	Subtotal	62,500
Information Collection and Dissemination		
317	Information Acquisition/Distribution	73,000
	Subtotal	73,000
Coordination Activities		
318	Senior Advisory Committee	20,500
319	Coordination of Harvard Subcontract	26,000
320	Coordination of Jackson Foundation Subcontract	120,000
321	Coordination of Tulane Subcontract	26,000
	Subtotal	192,500
Total Life-of Project Activities Budget		1,125,000

SUMMARY 1992 LOP ACTIVITY BUDGET



VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 301

BUREAU: R&D/H
 COUNTRY: United States
 DATE: BEGIN: January 1, 1992
 FIELD VISIT: None
 END: December 30, 1992

ACTIVITY MANAGER: Lennox, R.

TITLE OF ACTIVITY: General Administration/Office Management

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC Staff/A.I.D. Staff

LOCATION: VBC Office

OBJECTIVES: Maintain staff, equipment and facilities of the VBC Project.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Administrative, Accounting, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 600

BY WHOM: <u>Jan - CARREO</u>	1991	
	1992	\$390,000.00
DATE: <u>12-31-92</u>	TOTAL COST:	\$390,000.00

VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 302

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT: None
END: December 31, 1992

ACTIVITY MANAGER: Lennox, R.

TITLE OF ACTIVITY: General Technical Services and Preplanning

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC Staff/A.I.D. Staff

LOCATION: VBC Office

OBJECTIVES: Provide technical services not linked to specific activities

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Administrative, Technical, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 130

BY WHOM:

John CARROLL

1991

1992

DATE:

12-31-92

TOTAL COST:

\$70,000.00

\$70,000.00

ACTIVITY SHEET

FY 1992

CODE 303

BUREAU: R&D/H
COUNTRY: United States
DATE: **BEGIN:** January 1, 1992
FIELD VISIT: None
END: December 31, 1992

ACTIVITY MANAGER: Silverman, B.

TITLE OF ACTIVITY: Computer Systems Maintenance

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC and A.I.D. Staff

LOCATION: VBC Office

OBJECTIVES: Maintenance of computer hardware, software and data bases.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 200

BY WHOM: Jim Carroll

1991

1992

\$60,000.00

DATE: 12-31-91

TOTAL COST

\$60,000.00

VECTOR BIOLOGY AND CONTROL II

25

ACTIVITY SHEET

FY 1992

CODE 304

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT: None
END: December 31, 1992

ACTIVITY MANAGER: Lennox, R.

TITLE OF ACTIVITY: Liaison with R&D/Project Planning/Reporting

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC Staff/A.I.D. Staff

LOCATION: VBC Office

OBJECTIVES: Liaison with A.I.D. Staff and preparation of required contract reports.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Administrative, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 135

BY WHOM: John Carroll 1991
1992 \$72,500.00
DATE: 12-31-91 **TOTAL COST:** \$72,500.00

ACTIVITY SHEET

FY 1992

CODE 305

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT: None
FYD: December 31, 1992

ACTIVITY MANAGER: Silverman, B.

TITLE OF ACTIVITY: Liaison with Missions and Bureau for Africa Region

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D. and AFR Bureau Staff

LOCATION: VBC Office/AFR

OBJECTIVES: Keeping Bureau informed of VBC activities and develop plans for action.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 30

BY WHOM: *Chin...* 1991

1992

DATE: 12-31-91

TOTAL COST:

\$12,000.00

\$12,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 306

BUREAU: R&D/H
 COUNTRY: United States
 DATE: BEGIN: January 1, 1992
 FIELD VISIT: None
 END: December 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Liaison with Missions and Bureau for Latin America and Caribbean Region

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D. and LAC Bureau Staff

LOCATION: VBC Office/LAC

OBJECTIVES: Keeping Bureau informed of VBC activities and develop plans for action.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 30

BY WHOM:	<u>Jim Caruso</u>	1991	
		1992	\$12,000.00
DATE:	<u>12-31-91</u>	TOTAL COST:	\$12,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 307

BUREAU: R&D/H
 COUNTRY: United States
 DATE: BEGIN: January 1, 1992
 FIELD VISIT: None
 END: December 31, 1992

ACTIVITY MANAGER: Lennox, R.

TITLE OF ACTIVITY: Liaison with Missions and Bureaus of Europe and Near East Regions

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D., and Europe and Near East Bureau Staff

LOCATION: VBC Office/ENE

OBJECTIVES: Keeping Bureau informed of VBC activities and develop plans for action.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 10

BY WHOM: John CARROLL 1991

1992

DATE: 12-31-91

TOTAL COST:

\$5,000.00\$5,000.00

VECTOR BIOLOGY AND CONTROL II

29

ACTIVITY SHEET

FY 1991

CODE 308

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT: None
END: December 31, 1992

ACTIVITY MANAGER: Silverman, Barry

TITLE OF ACTIVITY: Liaison with Non-Regional Bureaus of A.I.D. other than R&D/H

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D., and other A.I.D. Staff

LOCATION: VBC Office

OBJECTIVES: Keeping A.I.D. Bureaus, offices and departments informed of VBC activities and developing appropriate action plans.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 10

BY WHOM: Dem Carroll 1991
1992 \$5,000.00
DATE: 12-31-91 **TOTAL COST:** \$5,000.00

VECTOR BIOLOGY AND CONTROL II

31

ACTIVITY SHEET

FY 1992

CODE 310

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT: None
END: December 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Liaison with World Health Organization (WHO) and Pan American Health Organization (PAHO)

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, WHO, PAHO and A.I.D. Staff Members

LOCATION: VBC Office, WHO/Geneva, and PAHO/Washington

OBJECTIVES: To inform WHO of VBC activities and to plan and implement joint endeavors in VBC central.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED:

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 40

BY WHOM: Thomas C. H. [Signature] 1991

1992

\$15,000.00

DATE: 12-31-91

TOTAL COST:

\$15,000.00

ACTIVITY SHEET

FY 1992

CODE 311

BUREAU: R&D/H
 COUNTRY: United States
 DATE: BEGIN: January 1, 1992
 FIELD VISIT: None
 END: December 31, 1992

ACTIVITY MANAGER: Silverman, B.

TITLE OF ACTIVITY: Liaison With Other Non-A.I.D. Agencies and Organizations (World Bank, Peace Corps, Global 2000, etc.)

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D. and other organizational staffs

LOCATION: VBC Office

OBJECTIVES: To keep other non-A.I.D. organizations aware of VBC activities and to initiate collaborative activities.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 40

BY WHOM: <u>John Chansong</u>	1991	
	1992	\$15,000.00
DATE: <u>12-31-91</u>	TOTAL COST:	\$15,000.00

VECTOR BIOLOGY AND CONTROL II

33

ACTIVITY SHEET

FY 1992

CODE 312

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT: None
END: December 31, 1992

ACTIVITY MANAGER: Andre, R.

TITLE OF ACTIVITY: Liaison with Missions and Bureau for Asia Region

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D., and Asia and Near East Bureau Staff

LOCATION: VBC Office/Asia

OBJECTIVES: Keeping Bureau informed of VBC activities and develop plans for action.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 10

BY WHOM: Don CARROLL 1991

1992

DATE: 12-31-91

TOTAL COST:

\$5,000.00

\$5,000.00

ACTIVITY SHEET

FY 1992

CODE 313

BUREAU: R&D/H
 COUNTRY: United States
 DATE: BEGIN: January 1, 1992
 FIELD VISIT: None
 END: December 31, 1992

ACTIVITY MANAGER: Lennox, R.

TITLE OF ACTIVITY: Core Contract Activity Development

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D. and Subcontractors' Staffs

LOCATION: VBC Office and Subcontractors' Offices

OBJECTIVES: To support the development of concept papers, activity sheets, activity implementation plans to be implemented under the Core VBC contract.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff and Subcontractors' Staffs

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 200

BY WHOM: John Carroll 1991

1992

DATE: 12-31-91

TOTAL COST:

\$ 97,500.00

\$ 97,500.00

ACTIVITY SHEET

FY 1992

CODE 315

BUREAU: R&D/H
 COUNTRY: United States
 DATE: BEGIN: January 1, 1992
 FIELD VISIT: None
 END: December 31, 1992

ACTIVITY MANAGER: Silverman, B.

TITLE OF ACTIVITY: VBC Intern Program

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC Staff, A.I.D. Staff and Interns

LOCATION: VBC Office

OBJECTIVES: Provide support and training for VBC Interns

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - September 31, 1991

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff and Subcontractors' Staffs

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 100

BY WHOM: John Carroll 1991

1992

DATE: 12-31-91

TOTAL COST:

\$27,500.00

\$27,500.00

VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 316

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT: None
END: December 31, 1992

ACTIVITY MANAGER: Heegaard, F.

TITLE OF ACTIVITY: Professional Development/Seminars/Outreach

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D., outside seminar speakers and organizations

LOCATION: United States

OBJECTIVES: Provide funds for VBC professional staff attendance at conferences and to support outside presentations at the VBC office.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

**PROPOSED PERSONNEL: VBC Staff
Seminar Speakers**

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 90

BY WHOM: Tom C. Hertz 1991

1992 \$35,000.00

DATE: 12-31-91 TOTAL COST: \$35,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 317

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT: None
END: December 31, 1992

ACTIVITY MANAGER: Nayeri, E.

TITLE OF ACTIVITY: Information Acquisition/Distribution

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D., Subcontractors, and Organization Staff Members

LOCATION: VBC Office

OBJECTIVES: This category will include journal subscriptions, inter-library loans, mailings, preparation of information packets and personnel costs.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - September 31, 1991

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 215

BY WHOM: [Signature] 1991

1992 \$73,000.00

DATE: 12-31-91 TOTAL COST: \$73,000.00

VECTOR BIOLOGY AND CONTROL II

39

ACTIVITY SHEET

FY 1992

CODE 318

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT: None
END: December 31, 1992

ACTIVITY MANAGER: Lennox, R.

TITLE OF ACTIVITY: Senior Advisory Committee (SAC)

ORIGIN OF ACTIVITY: A.I.D./R&D/H

AUDIENCE: VBC, A.I.D., Subcontractors' Staffs and SAC members

LOCATION: VBC Office

OBJECTIVES: Organize a committee comprised of Senior Advisors with expertise in areas complementary to VBC II's mandate and obtain advice from its members through formal meetings and informal communications.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - September 31, 1991

PERSONNEL/SKILLS REQUIRED: Technical, Support, Advisory

PROPOSED PERSONNEL: VBC Staff
A.I.D. Staff
Subcontractors' Staff
SAC Members

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 15

BY WHOM: John Carrales

DATE: 12-31-91

	1991	
	1992	\$20,500.00
TOTAL COST:		<u>\$20,500.00</u>

ACTIVITY SHEET

FY 1992

CODE 319

BUREAU: R&D/H
 COUNTRY: United States
 DATE: BEGIN: January 1, 1992
 FIELD VISIT: None
 END: December 31, 1992

ACTIVITY MANAGER: Lennox, R.

TITLE OF ACTIVITY: Coordination of Harvard Subcontract

ORIGIN OF ACTIVITY: VBC Contract

AUDIENCE: TAC, R&D/H, MSCI

LOCATION: USA

OBJECTIVES: To provide coordination between the VBC project staff and the staff of subcontractor Harvard University. 1) Participation in subcontractor coordination committee meeting. 2) Discussions and meetings between activity managers and subcontract coordinator.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff and Harvard Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 95

BY WHOM: John Carroll 1991
 1992 \$26,000.00
 DATE: 12-31-91 TOTAL COST: \$26,000.00

VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 320

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: January 1, 1992
FIELD VISIT:
END: December 31, 1992

ACTIVITY MANAGER: Andre, R.

TITLE OF ACTIVITY: Coordination of Jackson Foundation Subcontract

ORIGIN OF ACTIVITY: VBC Contract

AUDIENCE: TAC, R&D/H, MSCI

LOCATION: USA

OBJECTIVES: To provide coordination between the VBC project staff and the staff of subcontractor, Jackson Foundation. 1) Participation in subcontractor coordination committee meeting. 2) Discussions and meetings between activity manager and subcontract coordinator.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical, Support

PROPOSED PERSONNEL: VBC Staff and Jackson Foundation Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 220

BY WHOM: James Carroll

1991

1992

DATE: 12-31-91

TOTAL COST: \$120,000.00
\$120,000.00

ACTIVITY SHEET

FY 1992

CODE 321

BUREAU: R&D/H
 COUNTRY: United States
 DATE: BEGIN: January 1, 1992
 FIELD VISIT:
 END: December 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Coordination of Tulane University Subcontract

ORIGIN OF ACTIVITY: VBC Contract

AUDIENCE: TAC, R&D/H, MSCI

LOCATION: USA

OBJECTIVES: To provide coordination between the VBC project staff and the staff of subcontractor, Tulane University. 1) Participation in subcontractor coordination committee meetings. 2) Discussions and meetings between activity managers and subcontract coordinator.

SCHEDULE/ACTIVITY PLAN: January 1, 1992 - December 31, 1992

PERSONNEL/SKILLS REQUIRED: Technical and Support

PROPOSED PERSONNEL: VBC Staff and Tulane Staff

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 180

BY WHOM: *Jim Carroll* 1991
 1992
 DATE: 12-31-91 TOTAL COST: \$26,000.00
\$26,000.00

4. Mission and Bureau Requests

Responsiveness to Mission and Bureau needs will continue to be a top VBC priority. Higher priority will be given to requests for assistance that will:

- o Strengthen and make sustainable the management and operations of host-country institutions;
- o Promote intersectoral collaboration that links development and disease control, particularly in resettlement, agriculture, urbanization, irrigation, and water and sanitation;
- o Improve the sustainability of technical approaches to controlling morbidity;
- o Provide opportunities for communities to participate in improving control.

Six activities requested by Missions and Bureaus during the planning cycle, at an estimated cost of \$253,074, will be supported entirely by VBC core funds.

One new activity to support the Ivermectin Delivery Program (IDP) will be funded through a special allocation (OYB transfer) from R&D/H. So far, \$130,000 has been budgeted for IDP support in 1992, but an additional \$249,528 is available to respond to requests for VBC technical assistance from the participating PVOs during the next two years.

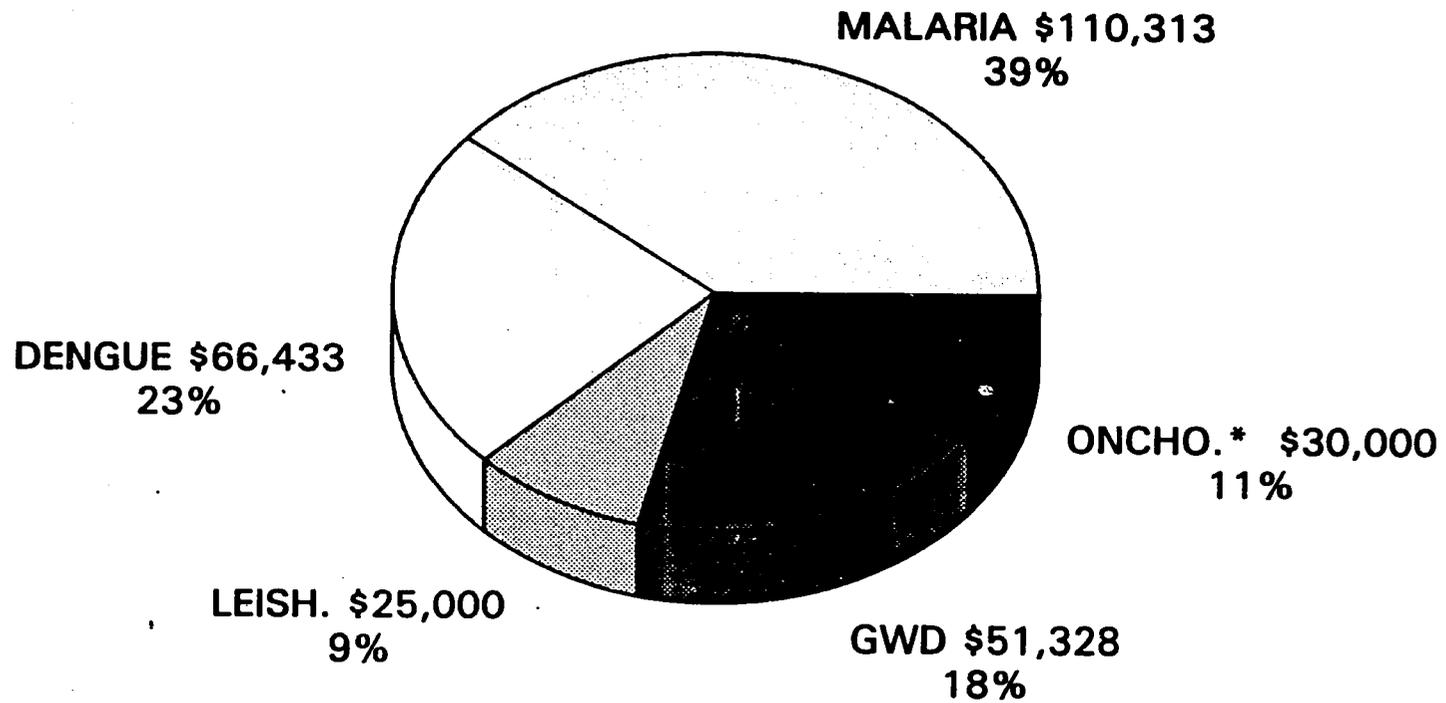
VBC has reserved a total of \$666,569 for additional Mission and Bureau requests during 1992, including \$258,000 to support general activities to improve vector-borne disease control and \$381,569 for activities that would fit into VBC's Environmental Initiative. Examples of such environmental activities include field tests of alternatives to insecticides and studies that explore the relationship between disease transmission and environmental changes resulting from agricultural development, urbanization and water management.

Mission and Bureau Requests Budget

Code #	Title	Budget \$
Core Activities		
322	Preparation of National Coordinators of GWD Programs for 1992 Regional Conference	51,328
323	Facilitation of WHO Regional Malaria Workshop for the Americas	60,000
324	Workshop on Impregnated Bed Nets for Malaria Control	30,000
325	Assessment of a Possible Dengue Control Program in Fiji	66,433
326	Transmission and Control of Leishmaniasis in Nepal	25,000
327	Pakistan Malaria Control HIS/MIS	20,313
Subtotal		253,074

Code #	Title	Budget \$
<hr/>		
IDP Activities		
349	Ivermectin Distribution Program Support	30,000
<hr/>		
Total Mission and Bureau Request Budget		283,074
Uncommitted Budget		
General		285,000
Environmental		381,569
<hr/>		
Total Uncommitted Budget		666,569

MISSION AND BUREAU REQUESTS BY DISEASE



*IDP

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 322

BUREAU: AFR
COUNTRY: Mali, Ghana,
Cameroon, Kenya, Nigeria
DATE: BEGIN: Jan, 1992
FIELD VISIT: Jan 30-Feb 15
& Mar 1992
END: Jul 31, 1992

ACTIVITY MANAGER: Heegaard, F.

TITLE OF ACTIVITY: Preparation of Country National Coordinators
of GWD Programs for 1992 Regional Conference

ORIGIN OF ACTIVITY: R&D/H request, UNICEF conference facilitation
(Activity No. 81267)

AUDIENCE: GWD Interagency Group, LSHTM, West African GWD-prevalent
countries, and other donor agencies supporting national
GWD eradication programs.

LOCATION: Mali, Ghana, Cameroon, Kenya, Nigeria

OBJECTIVES: The preparation of national program coordinators in
participation and presentations to the 4th regional GWD conference
scheduled for March, 1992 in Nigeria.

SCHEDULE/ACTIVITY PLAN: Phase I of this activity will require
approximately one month of travel through selected countries
currently designated as Mali, Ghana, Cameroon and Kenya between
late January and mid-February. The purpose is to work closely with
country coordinators in and around each of the four countries to
prepare them for more active and productive participation in the
regional conference. The second phase requires VBC's participation
in the regional conference scheduled for mid-March.

PERSONNEL/SKILLS REQUIRED: Specialist in management and process
facilitation.

PROPOSED PERSONNEL: Bill Hanson, VBC consultant requested by
UNICEF.

FOLLOW-UP ACTIVITIES: None identified.

48

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 59

BY WHOM:	<u>Jim Carroll</u>	1991	
		1992	<u>\$51,328.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	<u>\$51,328.00</u>

VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 323

BUREAU: LAC
COUNTRY: Brazil
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: Apr 24-30, 1992
END: Jul 30, 1992

ACTIVITY MANAGER: Arata, A./Lennox, R.

TITLE OF ACTIVITY: Who/PAHO Regional Malaria Conference - Phase II

ORIGIN OF ACTIVITY: R&D/H

AUDIENCE: A.I.D./W, WHO, PAHO, all MOH in Americas, and donors

LOCATION: Belem, Brazil

OBJECTIVES: To provide TA and Facilitation Services to PAHO in the organization and execution of the WHO sponsored Regional Conference on Malaria in the Americas. This action was initiated with Phase I in 1991 under Activity No. 81261. There are two elements of support: 1) two months for a technical officer to review background documents commissioned by PAHO; and 2) facilitation services during the conference, especially the workshop sessions in order to maximize the technical contribution of the national participants.

SCHEDULE/ACTIVITY PLAN: 1) Contract facilitator and technical officer (January); 2) Coordinate with PAHO to clarify role(s) of VBC consultants (January - February); 3) Organize required pre-conference visits to Brasilia (April); 4) Conference (April 24-30); and 5) Debriefing of technical officer by correspondence and facilitator at VBC.

PERSONNEL/SKILLS REQUIRED: 1) Facilitator - at least 10 years experience as facilitator; Spanish bicultural and bilingual. 2) Technical officer - broad experience in health and development issues, especially multisectoral coordination; experience in Latin America, fluent in Spanish and/or Portuguese.

PROPOSED PERSONNEL: 1) Facilitator: Fernando Cruz Villalba; 2) Technical Officer: Nancy Pielemeier; and 3) VBC staff: A. Arata

FOLLOW-UP ACTIVITIES: Synthesis of Conference report for USAIDs and LAC

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 30

BY WHOM:	<u>John Carroll</u>	1991	
		1992	<u>\$60,000.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	<u>\$60,000.00</u>

VECTOR BIOLOGY AND CONTROL II

51

ACTIVITY SHEET

FY 1992

CODE 324

BUREAU: R&D/H

COUNTRY:

DATE: BEGIN: Jan 1, 1992

FIELD VISIT: None

END: Jun 30, 1992

ACTIVITY MANAGER: Arata, A./Andre, R.

TITLE OF ACTIVITY: Workshop on Impregnated Bednets for Malaria Control

ORIGIN OF ACTIVITY: R&D/H

AUDIENCE: A.I.D., Missions, CDC

LOCATION: VBC

OBJECTIVES: To date, A.I.D. has supported a number of operational research activities on the use of impregnated bednets for malaria control. This workshop is to be organized to consider the feasibility of moving from operational research to operational use of bednets, and the factors that need to be considered in employing bednets on a large scale as a malaria control intervention.

SCHEDULE/ACTIVITY PLAN: 1) Preliminary planning meeting in January 1992; 2) Identification of participants (with R&D/H and CDC); 3) Invitations and arrangements; 4) Workshop (March 1992); and 5) Preparation of report and recommendations.

PERSONNEL/SKILLS REQUIRED: TBD

PROPOSED PERSONNEL: TBD

FOLLOW-UP ACTIVITIES: Use report to stimulate regional Bureaus to consider implementation of the strategy to be developed.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 60

BY WHOM: John Carroll

1991

1992

DATE: 12-31-91

TOTAL COST:

\$30,000.00

\$30,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 325

BUREAU: ASIA
 COUNTRY: Fiji
 DATE: BEGIN: Jan 1, 1992
 FIELD VISIT: Jan 27-Feb 15, 1992
 END: May 30, 1992

ACTIVITY MANAGER: Andre, R./Arata, A.

TITLE OF ACTIVITY: Assessment of a Possible Dengue Control Program in Fiji

ORIGIN OF ACTIVITY: Mission request from Suva

AUDIENCE: USAID/Suva, MOH in Fiji, donor organizations

LOCATION: Rural and urban locations on 2 to 3 islands in Fiji

OBJECTIVES: To determine the major epidemiological and ecological features which may lead to dengue outbreaks in Fiji to determine the capabilities in Fiji for dengue surveillance and control operations; to determine possible community actions to prevent or control dengue in certain situations in Fiji; to write a proposal for donor support for dengue control in Fiji.

SCHEDULE/ACTIVITY PLAN: 1) First week of field visit: delineate MOH concerns and goals relating to dengue transmission; assess dengue surveillance and control capabilities, past, present and future in Fiji. 2) Second week: visit different ecological situations (rural and urban) on several islands to determine the major epidemiological and ecological features, as well as community aspects, of dengue in Fiji. 3) Third week: write up proposal for donor control in collaboration with the mission and the MOH in Suva, and debrief.

PERSONNEL/SKILLS REQUIRED: Arbovirologist, Medical Entomologist, Clinician/Epidemiologist, Social Scientist

PROPOSED PERSONNEL: Dr. Brian Kay (Queensland Institute of Med. Rsch.), Dr. Steve Waterman (San Diego County Hlth. Dept.), Dr. Richard Andre (VBC), and Dr. Adi Eci Kikau (Univ. of the South Pacific)

FOLLOW-UP ACTIVITIES: Donor workshop in Suva to gain support for a dengue control program in Fiji.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 75

BY WHOM: John Carroll

1991

1992

DATE: 12-31-91

TOTAL COST:

\$66,433.00

\$66,433.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 326

BUREAU: ASIA
COUNTRY: Nepal
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: Mar 19 - Apr 17,
Jul 29 - Aug 21, 1992
END: Oct 31, 1992

ACTIVITY MANAGER: Andre R.

TITLE OF ACTIVITY: Transmission and Control of Leishmaniasis in Nepal

ORIGIN OF ACTIVITY: USAID/Kathmandu & MCD

AUDIENCE: USAID/Kathmandu, MCD - NEPAL, MOH - NEPAL

LOCATION: Central and Eastern Outer Terai of Nepal

OBJECTIVES: To train NMEO staff in the identification of sand flies. To determine the epidemiology of leishmaniasis in Nepal. To recommend control measures to be used by the NMEO to reduce the number of leishmaniasis cases in Nepal.

SCHEDULE/ACTIVITY PLAN: 1) Select study sites in the Outer Terai and begin training NMEO staff in the identification of vector sand flies. 2) Spend 4 weeks in the dry season and 4 weeks in the wet season collecting, identifying, and dissecting sand flies in endemic study villages.

PERSONNEL/SKILLS REQUIRED: Medical entomologist

PROPOSED PERSONNEL: Dr. Phil Lawyer

FOLLOW-UP ACTIVITIES: Development of a country strategy to control leishmaniasis.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 45

BY WHOM:	<u>Jim Carroll</u>	1991	
		1992	<u>\$25,000.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	<u>\$25,000.00</u>

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****FY 1992****CODE 327**

BUREAU: ASIA
COUNTRY: Pakistan
DATE: BEGIN: Dec 16, 1991
FIELD VISIT: None
END: Feb 29, 1992

ACTIVITY MANAGER: Silverman, B./Andre, R.

TITLE OF ACTIVITY: Pakistan: Malaria MIS/HIS Preparation

ORIGIN OF ACTIVITY: Activity No. 82245 - Computerized
Epidemiological Database - Pakistan

AUDIENCE: USAID/Islamabad, Pakistan MOH

LOCATION: Washington, D.C.

OBJECTIVES: To prepare demonstration databases, spreadsheets and maps for Pakistan Malaria MIS/HIS activity (82245).

SCHEDULE/ACTIVITY PLAN: Prepare databases, spreadsheets and maps (December 1991/January 1992); hold briefing in Washington on January 16, 1992.

PERSONNEL/SKILLS REQUIRED: Epidemiologist; MIS Specialist

PROPOSED PERSONNEL: Robert Scholtens; Martin Wulfe

FOLLOW-UP ACTIVITIES: Activity No. 82245

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 50

BY WHOM: Don Caldwell 1991
1992 \$20,320.00
DATE: 12-31-91 TOTAL COST: \$20,320.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET**

FY 1992

Ivermectin Activity
CODE 349**BUREAU:** R&D/H
COUNTRY: Guatemala, Niger
Cameroon, Nigeria, Burkina Faso
DATE: BEGIN: May 1, 1992
FIELD VISIT: TBD
END: Dec 31, 1992**ACTIVITY MANAGER:** Cobey, L.**TITLE OF ACTIVITY:** Ivermectin Distribution Program Support**ORIGIN OF ACTIVITY:** Activity No. 81257**AUDIENCE:** A.I.D./PVOs**LOCATION:** U.S., Guatemala, Niger, Cameroon, Nigeria, Burkina Faso**OBJECTIVES:** Follow-up and monitor implementation of IDP Monitoring and Reporting system. Assess progress of PVO efforts to improve the distribution of ivermectin in onchocerciasis endemic countries.**SCHEDULE/ACTIVITY PLAN:** 1) Monitor implementation of system in each of the participating countries; 2) Assess PVO and host-country personnel in data collection and use of the monitoring system.**PERSONNEL/SKILLS REQUIRED:** Program coordinator**PROPOSED PERSONNEL:** Linda Cobey and VBC staff**FOLLOW-UP ACTIVITIES:** Continued monitoring of program and revisions of HIS as required.**R&D CONTACT:** A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 75

BY WHOM: John Carroll

DATE: 12-31-91

1991	
1992	<u>\$30,000.00</u>
TOTAL COST:	\$30,000.00

5. Proactive Activities

VBC's proactive budget allows core staff and subcontractors to identify and serve unmet needs and to test the applicability of promising new technologies and methods. In past years, VBC has used its proactive mandate to field test new control tools, develop educational materials, and promote collaboration between different sectors and agencies.

Much of VBC's proactive agenda for 1992 consists of collaborative activities with international health and development organizations, including WHO, FAO, UNDP, PAHO and UNICEF. By pooling technical and financial resources and working together to leverage support from other donors, VBC and its collaborators will be able to undertake more ambitious projects that will have a greater impact on vector-borne disease problems.

In 1992, VBC will initiate 21 new or follow-on proactive activities that explore areas such as the connection between agriculture and disease transmission, the impact of river basin development on health, the economic impact of disease, and community participation in vector-borne disease control. The estimated budget for proactive activities is \$919,000.

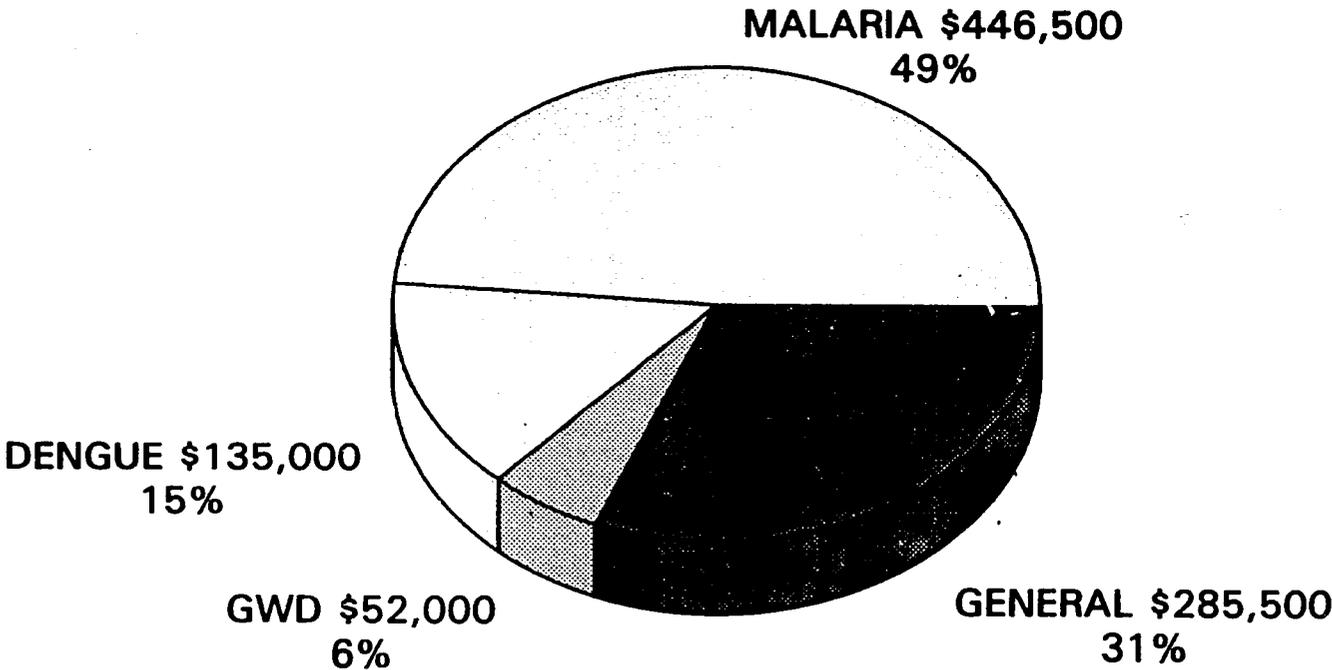
The 11 activities that comprise VBC's Environmental Initiative (described on pp. 5-6), with a total budget of \$482,000, are funded through a special allocation (OYB transfer) VBC received from R&D/H in 1991.

Proactive Budget

Code #	Title	Budget \$
Core Activities		
328	Field Test VBD Training Needs Assessment Instrument	20,000
329	French Translation of GWD Manual for Peace Corps Volunteers	12,000
330	Information Sharing Between VBC and Host Country Institutions (Universities, Research Centers) Selected LDC Countries	25,000
331	Field Testing of the Malaria Training Module	100,000
332	VBC Communications	66,000
333	Analysis of Mortality and Treatment Costs Associated with Dengue Outbreaks in an Asian Country	25,000
334	GWD Eradication in Cameroon, Phase IV	40,000
335	Malaria Coordination Group: Sectors	10,000
336	Model VBDC MIS Workshop/Development	60,000
337	Synthetic Peptide Malaria Diagnosis - Phase II	79,000
Subtotal		437,000

Code #	Title	Budget \$
Environmental Activities		
338	Biological Control for <i>Aedes</i> /Dengue (Phase II)	82,000
339	Regional Dengue/DHF Strategy with PAHO and CDC, Phase III	60,000
340	Insecticide Database	15,000
341	VBC-A.I.D./PEEM Third Interregional Conference on Environmental Management for VBD Control Through Agricultural Extension	35,000
342	Research in Rice Ecosystem Management for Disease Vector Control at the West Africa Rice Development Association (WARDA)	35,500
343	Manual on Environmental Management for Disease Vector Control for Ag. Extension Workers	70,000
344	The Human Health Component in Integrated River Basin Development Approaches	52,000
345	Incorporation of Health into the Moroccan GIS Sponsored by FAO/UNDP/GOM	10,000
346	Community-Based Environmental Management for Dengue Vector Control in Caribbean	50,000
347	Pilot Project: Development of Country Databases on Water Resources Development and VBDs	22,500
348	GIS Analysis of Urban Environmental/Dengue	50,000
Subtotal		482,000
Total Proactive Activities Budget		919,000

PROACTIVE ACTIVITY BUDGET BY DISEASE



VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****FY 1992****CODE 328**

BUREAU: Global
COUNTRY: United States
DATE BEGIN: Feb 1, 1992
FIELD VISIT: TBD
END: Dec 31, 1992

ACTIVITY MANAGER: Heegaard, F./Andre, R.

TITLE OF ACTIVITY: Field Test VBD Training Needs Assessment (ITNA) Instruments

ORIGIN OF ACTIVITY: VBC Malaria Control Training Module and Training Needs Assessment Instrument (Activity No. 81268)

AUDIENCE: Host country VBD program personnel, USAID Missions, VBC Consultants

LOCATION: VBC and participating subcontractor universities

OBJECTIVES: To field test a standardized training needs assessment instrument developed under Activity No. 81268.

SCHEDULE/ACTIVITY PLAN: Field test and refine TNA instruments and institutionalize the TNA process within VBC and within host countries.

PERSONNEL/SKILLS REQUIRED: Training needs analyst, HRD specialist and vector biologist

PROPOSED PERSONNEL: None

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 120

BY WHOM: Jim Carroll 1991
1992 \$20,000.00
DATE: 12-31-91 TOTAL COST: \$20,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 329

BUREAU: AFR
COUNTRY: Regional
DATE: BEGIN: Jan, 1992
FIELD VISIT: None
END: July 31, 1992

ACTIVITY MANAGER: Henry, K./Cobey, L.

TITLE OF ACTIVITY: French Translation of GWD Manual for Peace Corps Volunteers

ORIGIN OF ACTIVITY: Proactive: VBC and reviewers of 1991 English version of manual (Activity No. 81134)

AUDIENCE: PC volunteers and national eradication program staff in Francophone countries

LOCATION: VBC

OBJECTIVES: To translate into French the manual produced by VBC for use by PC volunteers participating in national programs of GWD eradication in Francophone countries.

SCHEDULE/ACTIVITY PLAN: 1) Identification of appropriate consultant and definition of the time frame within which the 212 page manual translation can be completed. 2) Review of translated material by Peace Corps/OTAPS review committee. 3) Production of manuals, the number of which will be decided by the OTAPS review committee.

PERSONNEL/SKILLS REQUIRED: English-French translation skills

PROPOSED PERSONNEL: TBD

FOLLOW-UP ACTIVITIES: None

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 30

BY WHOM: John CARROLL 1991
1992 \$12,000.00
DATE: 12-31-91 TOTAL COST: \$12,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 330

BUREAU: R&D/H
 COUNTRY: Worldwide
 DATE: BEGIN: Jan 1, 1992
 FIELD VISIT: None
 END: Dec 31, 1992

ACTIVITY MANAGER: E. Nayeri

TITLE OF ACTIVITY: Information Sharing Between VBC and Host-Country Institutions (Universities, Research Centers) in Selected LDC Countries.

ORIGIN OF ACTIVITY: VBC

AUDIENCE: Host-country institutions in LDCs selected by VBC.

LOCATION: VBC

OBJECTIVES: 1) To provide published literature to LDC institutions in exchange for fugitive literature for the VCIC collection. 2) Provide professional assistance to LDC institutions in the collection, organization and dissemination of information.

SCHEDULE/ACTIVITY PLAN: Formalize agreements with selected institutions in LDCs through the use of a "memorandum of understanding." Send packets of bibliographic citations and source documents to these institutions every two months. During alternate months, VBC will collect fugitive literature for incorporation into the VCIC.

Prepare manual which outlines the basic functions of managing an information center in LDCs.

PERSONNEL/SKILLS REQUIRED: 1) Information Specialist; 2) VBC Support Staff (for mailings); and 3) VCIC practicum graduate student

PROPOSED PERSONNEL: 1) Ellen Nayeri; 2) VBC Support Staff; and 3) TBD

FOLLOW-UP ACTIVITIES: Establish agreements through VBC subcontractor universities, foundations, or professional library associations to continue supporting the exchange agreements made during this activity.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 62

BY WHOM:	<u>John Carro</u>	1991	
		1992	<u>\$25,000.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	<u>\$25,000.00</u>

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 331

BUREAU: AFR, ASIA, LAC
 COUNTRY: 3-5 Countries TBD
 DATE: BEGIN: May 1, 1992
 FIELD VISIT: May thru Dec
 1992
 END: Dec 31, 1992

ACTIVITY MANAGER: Andre, R./Heegaard, F.

TITLE OF ACTIVITY: Field Testing of the Malaria Training Module

ORIGIN OF ACTIVITY: Proactive: Tulane/Harvard/Jackson Foundation

AUDIENCE: USAID Missions; Ministries of Health; Public health workers

LOCATION: Three to five different countries, to include one from Asia, Africa, and LAC

OBJECTIVES: To field test each of the five major units contained in the Malaria Training Module (AIP No. 81251) based upon the malaria training needs of each particular country (e.g., Unit 1 in Country X in Spanish, Unit 2 in Country Y in English, and Unit 3 in Country Z in French). To incorporate necessary changes into each of the five major units following the field tests (not including translation to Spanish and French, which will be covered under another activity).

SCHEDULE/ACTIVITY PLAN: The five units would be tested in the countries according to the timing desired by the Mission, the MOH, and the consultants. The activity would begin in May 1992 and end in December 1992.

PERSONNEL/SKILLS REQUIRED: Epidemiologists, Medical Entomologists, Malariologists, Public Health Educators from the subcontracting universities and the VBC consultant list.

PROPOSED PERSONNEL: Dr. John Cross (USUHS); Dr. Sylvie Gagarine (USUHS); Dr. Bill Scheibel (USUHS); Dr. Uwe Brinkmann (Harvard); Dr. Jessie Hobbs (Consultant); Mr. Larry Cowper (Consultant); Dr. Heather Sutherland (Consultant)

FOLLOW-UP ACTIVITIES: Implementation of modified Malaria Training Module in other countries, as requested by the missions. Translation of all of the major units within the module to French and Spanish.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 330

BY WHOM: <u>John Carroll</u>	1991	
	1992	<u>\$100,000.00</u>
DATE: <u>12-31-91</u>	TOTAL COST:	<u>\$100,000.00</u>

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****FY 1992****CODE 332**

BUREAU: R&D/H
COUNTRY: United States
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: None
END: Dec 31, 1992

ACTIVITY MANAGER: Henry, K.**TITLE OF ACTIVITY:** VBC Communications**ORIGIN OF ACTIVITY:** Proactive: Follow-up to Activity Nos. 81150, 81266 and 81267**AUDIENCE:** A.I.D. Bureaus and Missions, host-country governments and institutions, international and bilateral development organizations**LOCATION:** VBC**OBJECTIVES:** To develop materials to educate target audiences about vector-borne disease control and inform them about VBC activities.**SCHEDULE/ACTIVITY PLAN:** 1) Develop video discussion guide; 2) Write, produce and distribute 2-3 issues of newsletter; 3) Rewrite and produce brochure; 4) Develop and distribute series of bibliographic packets on VBDC issues; and 5) Translate video into Spanish.**PERSONNEL/SKILLS REQUIRED:** 1) Writer/editor, 2) Designer, 3) Training and development specialist, and 4) Video production firm**PROPOSED PERSONNEL:** 1) K. Henry 2) TBD**FOLLOW-UP ACTIVITIES:** Presentations on intersectoral approaches to disease control; responses to requests for information or TA**R&D CONTACT:** A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 166

BY WHOM: den Carrace

DATE: 12-31-91

1991	
1992	<u>\$66,000.00</u>
TOTAL COST:	\$66,000.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****FY 1992****CODE 333****BUREAU: ASIA****COUNTRY: TBD****DATE: BEGIN: Apr 30, 1992****FIELD VISIT: Jun 1-30, 1992****END: Sep 30, 1992****ACTIVITY MANAGER: Andre, R./Arata, A.****TITLE OF ACTIVITY: Analysis of Mortality and Treatment Costs Associated with Dengue Outbreaks in an Asian Country****ORIGIN OF ACTIVITY: Proactive****AUDIENCE: R&D/H, Missions, World Bank, WHO****LOCATION: TBD****OBJECTIVES: To provide justification for the implementation of dengue control measures by defining the aggregate costs of infection in children.****SCHEDULE/ACTIVITY PLAN: 1) Collection, analysis, interpretation of existing data; and 2) Report preparation and presentation to country decision-makers.****PERSONNEL/SKILLS REQUIRED: Epidemiologist/Economist****PROPOSED PERSONNEL: Mary Ettling****FOLLOW-UP ACTIVITIES: Development of a setting-specific control plan of action and assistance with implementation.****R&D CONTACT: A. Ertl**

APPROVED:

LEVEL OF EFFORT IN DAYS: 50

BY WHOM:	<u>Jim Carroll</u>	1991	
		1992	<u>\$25,000.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	<u>\$25,000.00</u>

VECTOR BIOLOGY AND CONTROL PROJECT II**ACTIVITY SHEET**

FY 1992

CODE 334

BUREAU: AFR
COUNTRY: Cameroon
DATE: BEGIN: Feb 1992
FIELD VISIT: Feb/Mar (5 wks)
 Jul/Aug (5 wks)
END: Oct 31, 1992

ACTIVITY MANAGER: Lennox, R.**TITLE OF ACTIVITY:** GWD Eradication in Cameroon, Phase IV**ORIGIN OF ACTIVITY:** Activity No. 81235**AUDIENCE:** National GWD program staff in Mayo Sava Department, and USAID, UNICEF, PC, Global 2000, and CARE collaborators**LOCATION:** Cameroon

OBJECTIVES: 1) To assist surveillance teams and assure data management procedures established during phases I-III in preparation for the next transmission season. 2) To implement a cost-effective scale-down plan for surveillance teams as eradication is achieved without losing all that has been gained. 3) To represent VBC at 4th African regional conference on eradication March 17-19.

SCHEDULE/ACTIVITY PLAN: Phase IV technical assistance will be implemented during two separate visits and will again be alternated with tasks performed for the A.I.D.-supported schistosomiasis control project in Cameroon. The first visit will occur during 5 weeks in late February and March in order to:

- (a) review all components of the program in Mayo Sava during the 1991 transmission season (including cost analysis);
- (b) plan the 1992 program for Mayo Sava with National and Peace Corps counterparts;
- (c) prepare and submit a budget to UNICEF for the April-October transmission season activities in Mayo Sava;
- (d) review and prepare a P of A with National GWD coordinator for other endemic regions, if any, that might have been identified during 1991 end-of-year surveys;
- (e) assist Cameroonian team with preparations for the 4th regional GWD conference scheduled for March, 1992;

- (f) attend the regional conference in Nigeria as VBC representative.

A second 4-5 week field assignment will be scheduled during July/August, 1992 for the purposes of:

- (a) assessing the 1992 intervention program in Mayo Sava;
 (b) assessing activities in other endemic areas (if existing);
 (c) planning the program and budget for non-transmission season (November-March) activities.

PERSONNEL/SKILLS REQUIRED: Parasitology/program management

PROPOSED PERSONNEL: Dr. George Greer

FOLLOW-UP ACTIVITIES: To be determined following completion of Phase IV.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 60

BY WHOM: <u>John CARROLL</u>	1991	
	1992	<u>\$40,000.00</u>
DATE: <u>12-31-91</u>	TOTAL COST:	<u>\$40,000.00</u>

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET**

FY 1992

CODE 335

BUREAU: Global
COUNTRY: United States
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: None
END: Sep 1, 1994

ACTIVITY MANAGER: Lennox, R.**TITLE OF ACTIVITY:** Malaria Coordination Group: Sectors**ORIGIN OF ACTIVITY:** Proactive**AUDIENCE:** Sectors of A.I.D., Bureaus**LOCATION:** VBC

OBJECTIVES: 1) To promote intersectoral interest and awareness of malaria impacts and interactions among development sector personnel in A.I.D. Bureaus and Divisions; and 2) To identify opportunities for intersectoral collaboration on malaria between other sectors such as Water Supply, Agriculture, Education, Forestry, Nutrition, Housing, Economics and Health Financing.

SCHEDULE/ACTIVITY PLAN: 1) Identify sectors and issues with potential impact related to malaria; 2) Plan and conduct workshop to address issues and identify opportunities for collaboration; 3) Prepare a review/report with ideas for R&D/H/VBC interaction with other sectors on malaria; and 4) Incorporate intersectoral initiatives into VBC work plan.

PERSONNEL/SKILLS REQUIRED: VBC staff; R&D staff; Sector heads from the following A.I.D. sectors: Water Supply; Agriculture; Health; Population; Education, Forestry; Nutrition; Housing; Health Services; Health Financing, Economics

PROPOSED PERSONNEL: VBC staff, R&D staff, A.I.D. sector heads

FOLLOW-UP ACTIVITIES: Future collaboration on vector-borne disease control activities within other sectors of A.I.D.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 15

BY WHOM:	<u>John C. Arnold</u>	1991	
		1992	<u>\$10,000.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST	\$10,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 336

BUREAU: Global
 COUNTRY: Global
 DATE: BEGIN: Jan 2, 1992
 FIELD VISIT:
 END: Jul 1, 1992

ACTIVITY MANAGER: Silverman/Heegaard

TITLE OF ACTIVITY: Workshop for the Development of Criteria and Specification of a Model VBDC MIS

ORIGIN OF ACTIVITY: VBC Proactive

AUDIENCE: R&D/H and USAIDS

LOCATION: VBC

OBJECTIVES: To develop specifications for databases for the control of VBDs in light of recent and ongoing attempts to develop a strategy for control of VBDs. This workshop will focus on the lessons-learned from VBC Project experiences in information system development and from the findings of the National Academy of Sciences Institute of Medicine's study, Committee for the Study on Malaria Prevention and Control: Status Review and Alternative Strategies, the American Association for the Advancement of Science's study, Malaria and Development in Africa: Across Sectoral Approach, the World Health Organization (WHO) Regional meetings on developing a strategy for malaria control and the WHO's summit on Strategies for the Prevention and Control of Malaria. The expected outcome of this workshop will be a detailed systems analysis of the strategy to be supported by a VBD control information system.

SCHEDULE/ACTIVITY PLAN: 1) Design workshop (January - February 1992); 2) invite participants; 3) assign participants to working groups; 4) hold pre-workshop briefing for working group leaders; 5) hold workshop (March 1992); 6) prepare report of workshop; and 7) develop prototype database.

PERSONNEL/SKILLS REQUIRED: 1) MIS specialist(s); 2) Malariologist(s); and 3) GIS specialist(s).

PROPOSED PERSONNEL: Workshop organizer and facilitator. Others to be determined.

FOLLOW-UP ACTIVITIES: Field test prototype database.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 139

BY WHOM: John Canale

1991

1992

DATE: 12-31-91

TOTAL COST:

\$60,000.00

\$60,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 337

BUREAU: LAC
 COUNTRY: Honduras
 DATE: BEGIN: Jan 1, 1992
 FIELD VISIT: TBD
 END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Synthetic Peptide Malaria Diagnosis - Phase II

ORIGIN OF ACTIVITY: Activity No. 81230 - Synthetic Peptide Malaria Analysis - Phase I

AUDIENCE: Missions/MOH for USAID-supported programs

LOCATION: Honduras

OBJECTIVES: In 1991 (Activity No. 81230) trials of this technique were conducted at Tulane with Honduran blood samples: the 1992 trials will be conducted in Honduras at a district malaria laboratory and comparing results to standard light-microscope and QBC diagnostic methods.

SCHEDULE/ACTIVITY PLAN: March 1992 - Workshop on immunossays in Honduras; April/May 1992 - Laboratory training in Honduras - initial blood samples taken; July 1992 - Evaluation of results, training personnel for operational use, comparison of peptide ELISA, thick blood smears and QBC

PERSONNEL/SKILLS REQUIRED: Immunology; malaria experience in Latin America; QBC technician

PROPOSED PERSONNEL: Drs. M. James and S. Montenegro-James, J. Alger: QBC technician from Harvard

FOLLOW-UP ACTIVITIES: USAID/Tegucigalpa contacted to consider study of economic impact of malaria in same area of Honduras and to work with MOH to improve malaria control operations in areas where high endemicity is demonstrated.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 150

BY WHOM: Don Carrole

DATE: 12-31-91

1991	\$
1992	<u>79,000.00</u>
TOTAL COST:	\$79,000.00

Includes QBC (Harvard)

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

Environmental Activity
CODE 338

BUREAU: LAC
 COUNTRY: Honduras
 DATE: BEGIN: Jan 1, 1992
 FIELD VISIT: TBD
 END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Biological Control (Copepods) for Aedes/Dengue (Phase II)

ORIGIN OF ACTIVITY: Tulane

AUDIENCE: Missions and MOH in dengue endemic areas

LOCATION: Progreso, Honduras

OBJECTIVES: In 1991 (Activity No. 81226) laboratory and small-scale field trials demonstrated the efficacy of copepods in controlling Aedes populations in man-made containers and the feasibility of mass-production (WHO biological control trials, stages I-III). The work proposed for 1992 will be a large-scale trial in Progreso (WHO Stage V) and simplification of mass rearing and release systems (WHO Stage IV). Work will be done in Progreso where Rockefeller Foundation-CDC work on community participation is conducted and populations are monitored.

SCHEDULE/ACTIVITY PLAN: The activities listed below will be conducted throughout the year, not in a sequential fashion.

- Organization of mass rearing facility;
- perfecting distribution systems, in association with Rockefeller-financed Integrated Dengue Control Project;
- compatibility of copepods with other methods of Aedes control;
- modeling effort using USDA model.

Note that VBC is providing approximately 30% of P.I. salary; remainder provided by Rockefeller Foundation and with U.S. base support from New Orleans Mosquito Control Board.

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PERSONNEL/SKILLS REQUIRED: 1) Ecologist, biocontrol specialist, Spanish-speaking; 2) Nicaraguan technician

PROPOSED PERSONNEL: 1) Dr. Gerald Marten; 2) Technician to be named.

FOLLOW-UP ACTIVITIES: TBD

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 164

BY WEEK:	<u><i>[Signature]</i></u>	1991	
		1992	<u>\$82,000.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	<u>\$82,000.00</u>

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Environmental Activity****FY 1992****CODE 339**

BUREAU: LAC
COUNTRY: Regional
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: TBD
END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A./Andre, R.**TITLE OF ACTIVITY:** Regional Dengue/DHF Strategy with PAHO and CDC, Phase III**ORIGIN OF ACTIVITY:** Proactive (follow-up to Activity Nos. 81158 and 81244)**AUDIENCE:** LAC Bureau, regional Missions, PAHO, CDC and regional countries**LOCATION:** VBC

OBJECTIVES: To continue collaboration (Dengue Task Force) with PAHO and CDC on regional dengue issues. Following PAHO meeting (December 1991) to prepare new Guidelines for Prevention and Control of Dengue, actions appropriate for A.I.D. and USAIDs will be identified. Regional inventory, developed by VBC in collaboration with PAHO and CDC, will be analyzed: TA/TDY will identify needs/interest of regional USAIDs and plan appropriate actions of Dengue Task Force.

SCHEDULE/ACTIVITY PLAN: 1) Review of new Guidelines for Dengue Prevention and Control (January - March, 1992); 2) Completion of inventory of dengue missions and problem areas (March - April 1992); 3) Development of regional plans (short and long-term) for A.I.D. USAIDs (June - July 1992); and 4) TDY by Dengue Task Force to solicit USAIDs participation in regional plan.

PERSONNEL/SKILLS REQUIRED: Ecologists, entomologists, epidemiologists, community participation specialists familiar with dengue/DHF problems in Latin America and Caribbean.

PROPOSED PERSONNEL: A. Arata, VBC; R. Andre, VBC; L. Cobey, VBC; J. Hobbs, R. Mera, S. Waterman, consultants; PAHO personnel; and CDC personnel (PASA)

FOLLOW-UP ACTIVITIES: Implementation of national/regional plans developed in this activity.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 102

BY WHOM: <u>John Carroll</u>	1991	
	1992	<u>\$60,000.00</u>
DATE: <u>12-31-91</u>	TOTAL COST:	<u>\$60,000.00</u>

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEETEnvironmental Activity
CODE 340

FY 1992

BUREAU: Global
 COUNTRY:
 DATE: BEGIN: Jan 1, 1992
 FIELD VISIT: None
 END: Mar 31, 1992

ACTIVITY MANAGER: Arata, A./Nayeri, E.

TITLE OF ACTIVITY: Insecticide Database

ORIGIN OF ACTIVITY: Activity No. 81243

AUDIENCE: Environmental officers, Consultants, Missions and
A.I.D./W

LOCATION: VBC

OBJECTIVES: To complete database on insecticides currently or potentially of use in vector control operations. Database format provides information on EPA status, toxicology, recommended use, resistance problems, etc: references to manufacturers and other data of interest to USAID-sponsored bilateral programs are included.

SCHEDULE/ACTIVITY PLAN: Work initiated in late 1991 to complete activity No. 81243: this AS replaces No. 81243 in 1992. Formatting completed but additional time is required to enter all data, and catalogue insecticide reference material in VCIC.

PERSONNEL/SKILLS REQUIRED: Entomologist, familiarity with insecticides

PROPOSED PERSONNEL: Yenenah Belayneh, A. Arata, E. Nayeri

FOLLOW-UP ACTIVITIES: Distribution

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 37.5

BY WHOM: John Carroll

1991

1992

\$15,000.00

DATE: 12-31-91

TOTAL COST:

\$15,000.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Environmental Activity****FY 1992****CODE 341****BUREAU: LAC****COUNTRY: Honduras - Regional Mtg.****DATE: BEGIN: Jan 1, 1992****FIELD VISIT: May 3-8, 1992****END: July 31, 1992****ACTIVITY MANAGER: Arata, A./Andre, R.****TITLE OF ACTIVITY: VBC-A.I.D./PEEM Third Interregional Workshop on Environmental Management for VBD Control Through Agricultural Extension****ORIGIN OF ACTIVITY: Proactive in collaboration with PEEM****AUDIENCE: USAIDs, A.I.D./W, other donors, disease-endemic countries****LOCATION: Honduras****OBJECTIVES: The first two workshops (Alexandria, Egypt and Bangkok) were held in 1991. Including this workshop, approximately 36 countries will have drafted coordinated public health-agricultural plans for collaboration in control of VBD. Subsequently PEEM, with VBC assistance, will synthesize the results of the three workshops to produce a guide for intersectoral collaboration emphasizing the potential role of agricultural extension services.****SCHEDULE/ACTIVITY PLAN: VBC will sponsor participants (travel only) for two participants from 6 of the 12 countries to be represented. 1) Mission clearances for participants; 2) Travel arrangements (January - March); and 3) Workshop (May 4-7, 1992) in Tegucigalpa, Honduras;****PERSONNEL/SKILLS REQUIRED: 1) Vector ecologist, familiarity with Latin American VBDC programs, Spanish speaking; 2) Agricultural extension specialist; and 3) mission approved participants from six invited countries (one VBDC specialist, one from agriculture).****PROPOSED PERSONNEL: 1) A. Arata; 2) Cliff Hoelscher (Texas A&M); and 3) 12 participants (TBD)****FOLLOW-UP ACTIVITIES: Preparation of guidelines, dissemination****R&D CONTACT: A. Ertl**

APPROVED:

LEVEL OF EFFORT IN DAYS: 50

BY WHOM: J. M. Campbell

DATE: 12-31-91

1991	
1992	<u>\$35,000.00</u>
TOTAL COST:	\$35,000.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Environmental Activity****CODE 342****FY 1992**

BUREAU: AFR
COUNTRY: Ivory Coast, Ghana, Niger
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: Jan 10-30 92; 1 week
 in May 92; 3 weeks in Sep 92
END: Dec 31, 1992

ACTIVITY MANAGER: Andre, R./Arata, A.**TITLE OF ACTIVITY:** Research in Rice Ecosystem Management for Disease Vector Control at the West Africa Rice Development Association (WARDA)**ORIGIN OF ACTIVITY:** Proactive: In collaboration with WHO/PEEM (Activity Sheet No. 10)**AUDIENCE:** USAIDs in sub-Saharan Africa, MOHs, MOAs, WHO/PEEM, WARDA**LOCATION:** Bouake, Ivory Coast; Accra, Ghana; Niamey, Niger**OBJECTIVES:** To develop and implement a number of specific research projects on rice ecosystem management for disease vector control as part of WARDA's program of work. To collaborate with national health and rice research institutions in WARDA's member states. To determine the impact of man-made ecological changes on malaria transmission in selected sites in West Africa using GIS and perhaps remote sensing technologies.**SCHEDULE/ACTIVITY PLAN:** Visit to Ivory Coast, Ghana, and Niger in January 1992 for 3 weeks. Obtain donor support. Draft joint proposal in Geneva in May 1992. Field visit for 3 weeks in September 1992 to countries to determine training and project needs. Finalization of project and funding by December 1992.**PERSONNEL/SKILLS REQUIRED:** PEEM secretariat member, medical entomologist (available for long-term) donor representatives, WHO representatives, WARDA representatives, VBC vector biologist, USUHS medical entomologists.**PROPOSED PERSONNEL:** Dr. Joe Lines (London School of Tropical Medicine) as long-term medical entomologist; Mr. Verhoef (WHO/PEEM); Dr. R. Andre (VBC); Dr. S. Gagarine (USUHS); Dr. D. Roberts (USUHS); Representatives from various agencies to be determined.

FOLLOW-UP ACTIVITIES: Implementation of projects in the field from January - December 1993. Joint team evaluation in January 1994 for 3 weeks. End VBC involvement September 30, 1994.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 75

BY WHOM: <u>Alan Carroll</u>	1991	
	1992	<u>\$35,500.00</u>
DATE: <u>12-31-91</u>	TOTAL COST:	\$35,500.00
	PEEM Cost:	\$266,500.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

Environmental Activity
CODE 343

FY 1992

BUREAU: Global
COUNTRY: Global
DATE: BEGIN: May 1, 1992
FIELD VISIT: TBD
END: Dec 31, 1992

ACTIVITY MANAGER: Andre, R./Arata, A.

TITLE OF ACTIVITY: Preparation of a Manual on Environmental Management for Disease Vector Control for Agricultural Extension Workers.

ORIGIN OF ACTIVITY: Proactive: In collaboration with WHO/PEEM (Activity sheet No. 1): based on the outcome of three inter-regional workshops (Alexandria, Bangkok, and Tegucigalpa) on the promotion of environmental management for disease vector control through agricultural extension programs.

AUDIENCE: USAIDs, MOHs, MOAs, universities in developing countries, WHO/PEEM and its collaborating centers

LOCATION: PEEM collaborating centers; consultant's office TBD

OBJECTIVES: To develop, produce and field test a manual which will instruct agricultural extension workers on incorporating an environmental health component into their work.

SCHEDULE/ACTIVITY PLAN: Identify appropriate consultant; follow up activities proposed at inter-regional workshops starting June 1992; submit first draft of manual in October 1992.

PERSONNEL/SKILLS REQUIRED: Entomologist with agricultural ecosystem experience

PROPOSED PERSONNEL: Dr. Jim Olson

FOLLOW-UP ACTIVITIES: Demonstration projects on the promotion of environmental management through agricultural extension.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 60

BY WHOM: Jim Caspell

DATE: 12-31-91

1991	
1992	<u>\$70,000.00</u>
TOTAL COST:	\$70,000.00

PEEM Cost: 11,000.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Environmental Activity****FY 1992****CODE 344**

BUREAU: Global
COUNTRY: Senegal, Paraguay,
 Thailand, Pakistan, Zimbabwe
DATE: BEGIN: March 1, 1992
FIELD VISIT: 1 week May 92; 20 weeks
 (4 weeks in each of 5 countries)
 between June 92 and May 93; 1 week
 Oct 93
END: Dec 31, 1993

ACTIVITY MANAGER: Andre, R./Lennox, R.**TITLE OF ACTIVITY:** The Human Health Component in Integrated River Basin Development Approaches - Phase I**ORIGIN OF ACTIVITY:** Proactive: In collaboration with WHO/PEEM (Activity Sheet No. 11); Harvard Senegal River Basin Model**AUDIENCE:** USAIDs, MOHs, MOIs, MOAs, WHO/PEEM, FAO**LOCATION:** Senegal, Paraguay, Thailand, Pakistan, Zimbabwe, Alexandria, Egypt**OBJECTIVES:** To collect and analyze information on various river basin development projects in the world and on the health indicators related to water associated VBDs. To prepare a detailed report that can serve as the basis for the 1993 PEEM technical discussions. To evaluate the Harvard Senegal River Basin Model as a planning and discussion tool.**SCHEDULE/ACTIVITY PLAN:** Select teams March 1992. Obtain government clearances April 1992. Set detailed terms of reference at FAO meeting in Rome. Team visits to 5 river basins carried out for 4 weeks/country between June 1992 and May 1993. Team reports submitted June 1993. Reports circulated to meeting attendees August 1993. PEEM meeting in Alexandria, Egypt October 1993. Final report submitted by December 1993.**PERSONNEL/SKILLS REQUIRED:** Engineers, VBD specialists, PEEM secretariat and panel members, VBC vector biologist**PROPOSED PERSONNEL:** Drs. Bradley, Harrington, King, Scudder, Kay, Snelling, Birley, Jobin, Furu, Mather, Andre (VBC), and a representative from Oswaldo Cruz.

FOLLOW-UP ACTIVITIES: Demonstration projects on the actual incorporation of a health component in river basin development.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 75

BY WHOM: <u>John CARROLL</u>	1991	
	1992	\$ 52,000.00
	1993	<u>48,000.00</u>
DATE: <u>12-31-91</u>	TOTAL COST:	\$100,000.00
	PEEM Cost:	\$235,000.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****FY 1992****Environmental Activity****CODE 345**

BUREAU: NE
COUNTRY: Morocco
DATE: BEGIN: Jan 15, 1992
FIELD VISIT: Feb-Mar 92
END: Sep 30, 1992

ACTIVITY MANAGER: Andre, R./Arata, A.

TITLE OF ACTIVITY: Incorporation of Health into the Moroccan Geographical Information System Sponsored by FAO/UNDP/GOM

ORIGIN OF ACTIVITY: Proactive: In collaboration with WHO/PEEM (Activity Sheet No. 2)

AUDIENCE: USAID/Rabat, WHO/PEEM, FAO, UNDP, Government of Morocco

LOCATION: Rabat, Morocco

OBJECTIVES: To set standards and criteria for environmental health data, and other indicators relevant to human health. To organize the information in suitable databases and to incorporate these into the Geographical Information System of the Moroccan River Basin Development and Monitoring Project.

SCHEDULE/ACTIVITY PLAN: Obtain formal support from Moroccan government to carry out plan. Find donor to purchase hardware/software (PAMAP). Approach WHO in region and ask for FAO staff input (agriculture person). Send consultant with knowledge of GIS and vector-borne diseases associated with river basins to Rabat for one month in February-March 1992.

PERSONNEL/SKILLS REQUIRED: Medical entomologist with knowledge of GIS who can speak Arabic or French.

PROPOSED PERSONNEL: Dr. Martin Birley (Liverpool School of Hygiene and Tropical Medicine)

FOLLOW-UP ACTIVITIES: Presentation at the 12th WHO/PEEM meeting in 1993 of this collaboration and its results as a model for other river basin projects.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 30

BY WHOM:	<u>Don CAROLO</u>	1991	
		1992	<u>\$10,000.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	\$10,000.00
		PEEM Cost:	\$17,200.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****FY 1991****Environmental Activity**
CODE 346**BUREAU:** LAC
COUNTRY: Caribbean sub-region
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: TBD
END: Dec 31, 1992 (Phase I)**ACTIVITY MANAGER:** Arata, A./Andre, R.**TITLE OF ACTIVITY:** Community-Based Environmental Management for Dengue Vector Control in Caribbean - Phase I**ORIGIN OF ACTIVITY:** Proactive: PEEM-VBC/A.I.D. collaborative environmental project**AUDIENCE:** USAIDs, other donors, MOH in eastern Caribbean**LOCATION:** Eastern Caribbean (sites to be selected)**OBJECTIVES:** To develop community-based environmental management strategies for dengue vector control in the urban and rural/urban parts of the islands of the eastern Caribbean.**SCHEDULE/ACTIVITY PLAN:** 1) Preparation - January-February 1992; 2) Consultant's TDY for selection of sites - March 1992; 3) Project design review - June 1992; 4) Implementation - October 1992 - September 1994 (24 months); and 5) Mid-term evaluation - October 1993**PERSONNEL/SKILLS REQUIRED:** TBD**PROPOSED PERSONNEL:** TBD**FOLLOW-UP ACTIVITIES:** Activity scheduled through September 1994 (continuing phases included in total budget)**R&D CONTACT:** A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 200

BY WHOM: John Carroll 1991
1992 \$ 50,000.00
1993 50,000.00
DATE: 12-31-91 **TOTAL COST:** \$100,000.00

Total PEEM Cost: \$170,000.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Environmental Activity****FY 1992****CODE 347**

BUREAU: Global
COUNTRY: Philippines, India,
 Guatemala
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: 5 weeks between Jan
 and Jun 92; 4 weeks Jul 92; 5
 weeks Jan-Feb 93; 1 week Jan 94
END: Dec 31, 1992

ACTIVITY MANAGER: Lennox, R./Andre, R.

TITLE OF ACTIVITY: Pilot Project on the Development of Country Databases on Water Resources Development Projects and Vector-borne Diseases.

ORIGIN OF ACTIVITY: Proactive: In collaboration with WHO/PEEM (Activity Sheet No. 9)

AUDIENCE: USAIDs, MOHs, MOTs, MOAs, WHO/PEEM and its collaborating centers, UNESCO, ICID

LOCATION: Switzerland, Philippines, India, Tanzania, Ghana, and Guatemala

OBJECTIVES: To establish national databases in a standard format for WHO/PEEM on water resources development and vector-borne disease transmission. To provide a basis for a global monitoring of water resources development and its impact on health.

SCHEDULE/ACTIVITY PLAN: Find donor to purchase hardware and software in January 1992. Travel of PEEM secretariat members for five weeks between January and June 1992. Consultant on computer databases for 4 weeks in July 1992. Training of local staff by consultant for 2 week in each of 5 countries January-February 1992. Evaluation of project January-March 1994.

PERSONNEL/SKILLS REQUIRED: PEEM secretariat members, computer consultant, consultant on VBD with database skills.

PROPOSED PERSONNEL: Robert Bos, WHO/PEEM (Philippines, India, Guatemala); Mr. Verhoef, WHO/PEEM (Tanzania, Ghana); Computer consultant (TBD) for development of database and for training during implementation of project; Consultant (TBD) with VBD background and expertise in databases.

FOLLOW-UP ACTIVITIES: Expansion of computer network to include other countries. The preparation of a report on the nature and magnitude of global vector-borne disease problems related to water resources development projects.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 45

BY WHOM:	<u>John CARROLL</u>	1991	
		1992	<u>\$22,500.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	<u>\$22,500.00</u>
		PEEM Cost:	\$85,000.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Environmental Activity****FY 1992****CODE 348**

BUREAU: LAC
COUNTRY: Honduras
DATE: BEGIN: Apr, 1992
FIELD VISIT: TBD
END: Dec, 31, 1992

ACTIVITY MANAGER: Andre, R./Arata, A.

TITLE OF ACTIVITY: GIS for Analysis of Urban Environment/Dengue

ORIGIN OF ACTIVITY: Activity No. 81246

AUDIENCE: Initially Central American USAIDs and MOHs - later to be global

LOCATION: Honduras

OBJECTIVES: To demonstrate the utility of GIS in organizing and implementing vector control resources in relation to urban environments and dengue. Subsequent phases would extend to other endemic urban areas of the Americas, and possibly to malaria control programs.

SCHEDULE/ACTIVITY PLAN: 1) Visit (April 1992) of Dr. Roberts for coordination with PAHO and MOH. 2) Establishment of GIS, local training and local data entry (May - November 1992). 3) Initial evaluation of GIS in field and utility in national dengue control program (December 1992).

PERSONNEL/SKILLS REQUIRED: Medical entomologists, experienced with GIS, dengue control in Latin America, and urban environmental factors which lead to dengue outbreaks.

PROPOSED PERSONNEL: 1) Dr. Donald Roberts (USUHS); 2) Technician (USUHS); 3) Technician (host country national); and 4) Dr. Richard Andre, VBC Staff.

FOLLOW-UP ACTIVITIES: As separate activities, GIS will be applied to dengue surveillance control in other countries and possibly to malaria endemic zones.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 40

BY WHOM: *De CARROLL*

DATE: 2-31-91

1991	
1992	<u>\$50,000.00</u>
TOTAL COST:	<u>\$50,000.00</u>

6. Continuing Activities

The following 13 activities began in 1991 and will be completed during 1992. One of these continuing activities supports the Ivermectin Distribution Program (IDP) and one is a continuing environmental activity.

Continuing Activities Budget

Code #	Title	Budget \$
Core Activities		
350	Publication: English Abstracts of Latin American Presentations at 1991 AMCA Meeting	2,946
351	Assistance with Development of Kenya National Malaria Control Strategy	44,421
352	Training Module in Malaria Prevention and Control	147,438
353	Publication AMCA Symposium - Community Participation	17,675
354	Development of Training Needs Assessment Instrument for Malaria Training Module	23,065
355	Insecticide Repellency in Malaria Vector Control	6,000
356	Collaborative Operational Research with Nepal MCP and WHO, Phases II and III	17,720
357	Africa VBD Situational Analysis, Phase I	30,162
358	GIS for Dengue/Central America	25,601
359	Benin Rural Water Supply Project	6,663
360	Niger Health Sector Support	32,788
Subtotal		354,479

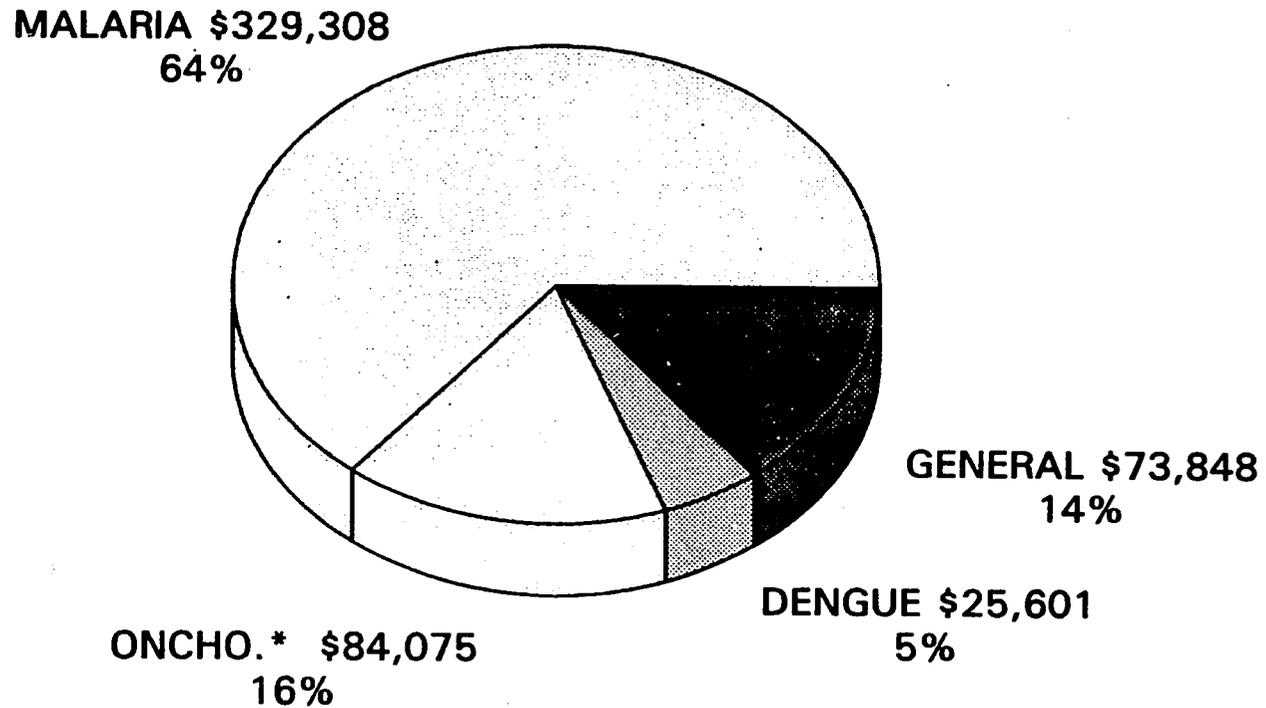
109

Code #	Title	Budget \$
<hr/>		
Environmental Activities		
361	Ricefield Vector Project	74,278
Subtotal		<hr/> 74,278
Ivermectin Activities		
362	Development of Ivermectin Monitoring System	84,075
Subtotal		<hr/> 84,075
<hr/>		
Total Continuing Activities Budget		512,832

CONTINUING ACTIVITY BUDGET BY DISEASE

Vector Biology and Control Project

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*IDP

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

Continuing Activity No. 81263

CODE 350

BUREAU: LAC
COUNTRY: Regional
DATE: BEGIN: Oct 22, 1991
FIELD VISIT: None
END: Feb 28, 1992

ACTIVITY MANAGER: Arata, A.**TITLE OF ACTIVITY:** Publication: English Abstracts of Latin American Presentations at 1991 AMCA Meeting**ORIGIN OF ACTIVITY:** Proactive: VBC, CDC and organizers of 1991 annual meeting of American Mosquito Control Association (AMCA) (Continuing Activity No. 81263)**AUDIENCE:** LAC Bureau, USAIDs in Latin America, national malaria/vector control programs**LOCATION:** Central**OBJECTIVES:** Twenty-six (26) Latin American scientists, working on VBDC in their countries, were invited to present results of their investigations or control activities at the 1991 meeting of the AMCA. The objective of this activity is to publish the abstracts of the presentations in the Journal of the AMCA.**SCHEDULE/ACTIVITY PLAN:** The work is in galley-proof: billing should be in January 1992. Publication is scheduled in Journal of AMCA for Winter 1991/1992.**PERSONNEL/SKILLS REQUIRED:** none**PROPOSED PERSONNEL:** none**FOLLOW-UP ACTIVITIES:** Distribution by CDC (San Juan): VBC will receive 100 reprints.**R&D CONTACT:** A. Ertl

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APPROVED:

LEVEL OF EFFORT IN DAYS: 6

BY WHOM: John CARROLL

DATE: 12-31-91

1991	
1992	<u>\$2,946.00</u>
TOTAL COST:	\$2,946.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET**

FY 1992

Continuing Activity No. 81265

CODE 351

BUREAU: AFR
COUNTRY: Kenya
DATE: BEGIN: Oct 25, 1991
FIELD VISIT: Feb 15-28, 1992
END: Jul 15, 1992

ACTIVITY MANAGER: Lennox, R.**TITLE OF ACTIVITY:** Assistance with Development of Kenya National Malaria Control Strategy - Phase II**ORIGIN OF ACTIVITY:** USAID/Nairobi VBC (Continuing Activity No. 81265)**AUDIENCE:** USAID/Nairobi GOK/MOH/DVBD**LOCATION:** Kenya**OBJECTIVES:** To assist the Kenya MOH in developing a National Malaria Control Plan and assist the MOH in preparing a marketing document for a Malaria Donors Conference.**SCHEDULE/ACTIVITY PLAN:** 1) Provide support for preparation of the National Plan Document. 2) Assist in finalizing the plan. 3) Prepare a document for marketing the plan to donors.**PERSONNEL/SKILLS REQUIRED:** 1) Epidemiologist/Malariologist (through CDC); 2) Vector Control/Program Specialist; and 3) Plan Development Coordinator.**PROPOSED PERSONNEL:** 1) Kent Campbell; 2) R. Lennox; and 3) Jennifer Hill.**FOLLOW-UP ACTIVITIES:** Technical assistance if needed in control program implementation.

R&D CONTACT: A. Ertl

APPROVED:	LEVEL OF EFFORT IN DAYS:	95
BY WHOM: <u>Don Carrol</u>	1991	\$12,838.00
	1992	<u>44,421.00</u>
DATE: <u>12-31-91</u>	TOTAL COST:	\$57,259.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

Continuing Activity No. 81251
CODE 352

BUREAU: Global
 COUNTRY: United States
 DATE: BEGIN: Jan 1, 1991
 FIELD VISIT: Jan 23-24; Jul 11-12, 1991
 END: Jun 30, 1992

ACTIVITY MANAGER: Andre R.

TITLE OF ACTIVITY: Training Module in Malaria Prevention and Control

ORIGIN OF ACTIVITY: Proactive (subcontractors); Development of VBC II Training Agenda (Continuing Activity No. 81251)

AUDIENCE: USAIDs; ministries of health; public health workers

LOCATION: At subcontracting universities (Harvard, Tulane, USUHS) and VBC

OBJECTIVES: To produce a comprehensive training module in malaria prevention and control for Level I, II, and III countries which have malaria control problems.

SCHEDULE/ACTIVITY PLAN: Each university would work on the module for Level I, II, or III at their university during the year; two person-months per selected individual. VBC would coordinate the activity by holding a two-day TPM in January and in July.

PERSONNEL/SKILLS REQUIRED: Epidemiologist (3); Medical Entomologist (3); Public Health Educator (1); Library technicians (3); Editor.

PROPOSED PERSONNEL: Epidemiologists, Entomologist, Library technicians to be selected by the respective university. Dr. Maurice Apted. Kathleen Henry.

FOLLOW-UP ACTIVITIES: To run in parallel with activity entitled, "Development of VBD Training Needs Assessment". Field test of module in appropriate LDC.

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R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 110

BY WHOM:	<u>Don CARROLL</u>	1991	\$130,562.00
		1992	<u>147,438.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	\$278,000.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Continuing Activity No. 81260****FY 1991****CODE 353****BUREAU:** Global**COUNTRY:****DATE BEGIN:** Sep 4, 1991**FIELD VISIT:** None**END:** June 30, 1992**ACTIVITY MANAGER:** Arata, A.**TITLE OF ACTIVITY:** Publication AMCA Symposium - Community Participation**ORIGIN OF ACTIVITY:** Symposium held at 1991 AMCA Meeting (Continuing Activity No. 81260)**AUDIENCE:** USAIDs, A.I.D. and Tropical Disease Control Specialists**LOCATION:** Central**OBJECTIVES:** To publish a concise review of efforts to mobilize community participation in the control of vector-borne diseases. Publication in the Transactions of the Royal Society of Tropical Medicine will provide a broad distribution (3,800) plus several hundred copies for targeted distribution.**SCHEDULE/ACTIVITY PLAN:** Manuscripts are expected to be completed in March 1992; editing will be completed and the manuscript in the hands of the editor of the Transactions by end of June 1992.

None of the authors are to be paid for writing or editing. Funding is for publication costs, distribution and VBC editor for polishing final drafts before submission to the Transactions' editor.

PERSONNEL/SKILLS REQUIRED: 1) Project Coordinator and 2) Editor**PROPOSED PERSONNEL:** 1) Dr. A. Arata, 2) K. Henry, and 3) VBC Staff**FOLLOW-UP ACTIVITIES:** Distribution of reprints**R&D CONTACT:** A. Ertl

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APPROVED:

LEVEL OF EFFORT IN DAYS: 6

BY WHOM: Clara Carroll

1991

1992

\$17,675.00

DATE: 12-31-91

TOTAL COST:

\$17,675.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET**

FY 1992

Continuing Activity No. 81268

CODE 354

BUREAU: Global
COUNTRY: United States
DATE: BEGIN: Dec 4, 1991
FIELD VISIT: Dec 4, 1991
END: Apr 30, 1992

ACTIVITY MANAGER: F. Heegaard/Andre, R.**TITLE OF ACTIVITY:** Development of Training Needs Assessment Instrument for Malaria Training Module**ORIGIN OF ACTIVITY:** Proactive - in conjunction with Malaria Training Module - Activity No. 81251 (Continuing Activity No. 81268)**AUDIENCE:** USAIDs; Ministries of Health; staff of national malaria control programs.**LOCATION:** U.S. - VBC Office**OBJECTIVES:** . To develop Training Needs Assessment Instrument to be used in association with the VBC Malaria Training Module under development in Activity No. 81251.**SCHEDULE/ACTIVITY PLAN:** Start: December 4, 1991. 1) Develop a general ITNA framework for identifying and classifying HRD related organizational problems by January 31, 1992. 2) Review and analyze units of the Malaria Training Module for development of knowledge-specific and subject-specific questions by February 28, 1992. 3) Presentation of draft ITNA instrument to VBC and R&D/H by March 15, 1992 and 4) Final report by March 30, 1992.**PERSONNEL/SKILLS REQUIRED:** 1) Training needs analyst; 2) ID/HRD Specialist; 3) Medical entomologist(s) and epidemiologist(s) for consultation.**PROPOSED PERSONNEL:** 1) Heather Sutherland (consultant; 2) Flemming Heegaard (VBC); and 3) McWilson Warren (CDC), Jesse Hobbs (consultant), Uwe Brinkmann (Harvard).**FOLLOW-UP ACTIVITIES:** Field test Training Needs Assessment Instrument as preliminary step in employment of Malaria Training Module in selected countries.

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R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 44

BY WHOM:	<u>Don Carroll</u>	1991	\$ 57.00
		1992	<u>23,065.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	\$23,122.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET**

FY 1992

Continuing Activity No. 81131

CODE 355

BUREAU: Global
COUNTRY: Global
DATE: BEGIN: May 10, 1990
FIELD VISIT: None
END: Feb 28, 1992

ACTIVITY MANAGER: Arata, A./Andre, R.

TITLE OF ACTIVITY: Insecticide Repellency in Malaria Vector Control

ORIGIN OF ACTIVITY: Proactive/USUHS Concept Paper (Continuing Activity No. 81131)

AUDIENCE: Regional Bureaus, Missions, R&D/H, consultants, health care professionals and malaria control specialists with U.S. AID and LDCs.

LOCATION: USUHS, VBC

OBJECTIVES: Conduct a comprehensive literature review and synthesis of available information on insecticide repellency as exhibited by malaria vectors. The goal is to develop a more knowledgeable perspective for interpreting and making use of behavioral avoidance of insecticides in malaria control strategies.

SCHEDULE/ACTIVITY PLAN: Completion of continuing activity by end of February 1992.

PERSONNEL/SKILLS REQUIRED: Vector control specialist

PROPOSED PERSONNEL: Donald R. Roberts, USUHS

FOLLOW-UP ACTIVITIES: Publication

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 12

BY WHOM:	<u>Gen Charles</u>	1991	\$53,785.00
		1992	<u>6,000.00</u>
DATE:	<u>12-21-91</u>	TOTAL COST:	\$59,785.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

Continuing Activity No. 81262

CODE 356

BUREAU: ASIA
 COUNTRY: Nepal
 DATE: BEGIN: Oct 1, 1991
 FIELD VISIT: Dec, 1992
 END: Feb, 1993

ACTIVITY MANAGER: Arata, A./Andre, R.

TITLE OF ACTIVITY: Collaborative Operational Research with
Nepal MCD and WHO, Phases II and IIIORIGIN OF ACTIVITY: PHASE I (Activity No. 81252) (Continuing
Activity No. 81262)AUDIENCE: Nepal MOH, USAID/Kathmandu, WHO/SEARO, WHO/CTD/Geneva,
AID/R&D/H

LOCATION: Nepal

OBJECTIVES: The overall goal established by a recently completed phase I activity is to assess the status of clinical diagnosis of malaria in selected health posts following integration of these services into the national health system.

SCHEDULE/ACTIVITY PLAN: Phases II and III will be combined into the activity described here and will include the longitudinal collection of data with which to assess the perceived problem of clinical diagnosis (phase II), and the analysis and interpretation of data and report generation (phase III) for submission to the MOH.

Phase II will be carried out entirely by the MCD with administrative support from the District Public Health Offices in selected districts during the May-October 1992 transmission season.

Phase III will require technical assistance from the protocol design team composed of VBC and WHO staff and is expected to occur during two weeks in December 1992.

PERSONNEL/SKILLS REQUIRED: Field epidemiologist

PROPOSED PERSONNEL: Staff Epidemiologist

FOLLOW-UP ACTIVITIES: The next step in operational research sequence is to design an intervention based on the findings of the activity that describes the problem.

R&D/E CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 35

BY WHOM: <u>Don Carroll</u>	1991	\$ 333.00
	1992	<u>17,720.00</u>
DATE: <u>12-31-91</u>	TOTAL COST:	\$18,053.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET**

FY 1992

Continuing Activity No. 81233

CODE 357

BUREAU: AFR
COUNTRY: Region-wide
DATE: BEGIN: Jun 1, 1992
FIELD VISIT:
END: Dec 31, 1992

ACTIVITY MANAGER: Silverman, B./Arata, A.

TITLE OF ACTIVITY: Africa VBD Situational Analysis, Phase I

ORIGIN OF ACTIVITY: Proactive (Continuing Activity No. 81233)

AUDIENCE: R&D/H, USAIDs, MOHS

LOCATION: Washington

OBJECTIVES: To develop a database of epidemiological data that describes the prevalent VBDs in sub-Saharan countries.

SCHEDULE/ACTIVITY PLAN: 1) Conduct a needs analysis (VBC, R&D/H, Africa Bureau, and USAIDs); 2) Determine specifications and format of database and database reports; 3) Program database; 4) Collect data to be entered into database; 5) Abstract data; 6) Enter data into database; 7) Generate reports; and 8) Update database as required.

PERSONNEL/SKILLS REQUIRED: Epidemiologist; HIS/MIS Specialist; Information Specialist; and Database Specialist

PROPOSED PERSONNEL: B. Silverman

FOLLOW-UP ACTIVITIES: Continuous updating of database

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 60

BY WHOM:	<u>Don CARROLL</u>	1991	\$15,269.00
		1992	<u>30,162.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	\$45,431.00

ACTIVITY SHEET**Continuing Activity No. 81246****FY 1992****CODE 358**

BUREAU: LAC
COUNTRY: TBD - Latin America
DATE: BEGIN: Jan 1, 1991
FIELD VISIT: TBD
END: Dec 31, 1992

ACTIVITY MANAGER: Andre, R./Arata, A.**TITLE OF ACTIVITY:** GIS for Dengue/Central America**ORIGIN OF ACTIVITY:** Proactive: Jackson Foundation (Continuing Activity No. 81246)**AUDIENCE:** Initially Central American USAIDs and MOHs - later to be global**LOCATION:** TBD

OBJECTIVES: To demonstrate the utility of GIS in organizing and implementing vector control resources: the initial phase will be implemented where available data and a suitable dengue control program exists. Subsequent phases would extend to other endemic urban areas of the Americas, and possibly to malaria control programs.

SCHEDULE/ACTIVITY PLAN: (Year One) 1) Initial visit (January 1991) of Dr. Roberts for coordination with PAHO and MOH. 2) Workshop (February 1991 at USUHS) to demonstrate GIS and coordinate with PAHO/W and CDC/San Juan, Puerto Rico. 3) Establishment of GIS; local training and local data entry (March - June, 1991). 4) Initial evaluation of GIS in field and utility in national dengue control program.

PERSONNEL/SKILLS REQUIRED: Medical entomologist, experienced with GIS and dengue control in Latin America.

PROPOSED PERSONNEL: 1) Dr. Donald Roberts (USUHS); 2) Technician (USUHS); 3) Technician (host country national); and 4) Coordination: National MOH and Dr. M. Nelson, PAHO

FOLLOW-UP ACTIVITIES: As separate activities, GIS will be applied to dengue surveillance control in other countries and possibly to malaria endemic zones.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 40

BY WHOM:	<u>Don Carroll</u>	1991	\$ 1,997.00
		1992	<u>25,601.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	\$ 27,598.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Continuing Activity No. 81152****FY 1992****CODE 359****BUREAU: AFR****COUNTRY: Benin****DATE: BEGIN: May 20, 1990****FIELD VISIT: Jun 5-26****END: Mar 30, 1992****ACTIVITY MANAGER: Henry, K.****TITLE OF ACTIVITY: Benin - Rural Water Supply Project with
GOB/UNICEF/USAID/Peace Corps****ORIGIN OF ACTIVITY: Request from R&D/H and AFR (Continuing
Activity No. 81152)****AUDIENCE: GOB, USAID/Coutenou and other implementors****LOCATION: Benin****OBJECTIVES: To assess the progress of project in achieving goals in
improving water supply and preventing associated diseases. To
assess effectiveness of collaboration. To assess potential need
for an add-on or a follow-on project.****SCHEDULE/ACTIVITY PLAN: 1) Secure approvals. 2) Participate in
TPM. 3) Participate in field evaluation. 4) Write disease
section of evaluation. 5) Debrief USAID, R&D, AFR and VBC. 6)
Complete final report in January 1992. 7) Translate report into
French. 8) Distribute report in February-March, 1992..****PERSONNEL/SKILLS REQUIRED: Vector-borne disease control
specialist/epidemiologist with broad field experience. Fluent in
French.****PROPOSED PERSONNEL: Subcontractor - Harvard****FOLLOW-UP ACTIVITIES: None****R&D CONTACT: A. Ertl**

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APPROVED:

LEVEL OF EFFORT IN DAYS: 25

BY WHOM:	<u>Don Carroll</u>	1991	\$31,104.00
		1992	<u>6,663.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	\$37,767.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****FY 1992****Continuing Activity No. 81259****CODE 360****BUREAU: AFR****COUNTRY: Niger****DATE: BEGIN: Sep 4, 1991****FIELD VISIT: Phase I - Sep 7 -
Oct 8, 1991; Phase II - Apr 10
- May 11, 1992; Phase III - Sep
4 - Oct 5, 1992****END: Dec 31, 1992****ACTIVITY MANAGER: Andre, R.****TITLE OF ACTIVITY: Niger Health Sector Support****ORIGIN OF ACTIVITY: PIO/T No. 683-0254 (Continuing Activity No.
81259)****AUDIENCE: USAID/Niamey; MOH/GON****LOCATION: Niamey, Gaya, Tessaoua, Aderbissinat; Niger****OBJECTIVES: 1. Methodology - to develop a standardized methodology,
suitable for health care workers, for the collection of
epidemiological data on malaria. 2. Surveillance - using the
above methodology, the collection of data on the incidence and
nature of malaria in Niger through seasonal baseline surveys of
sentinel sites; in parallel, determine the entomological properties
of vector transmission of malaria.****SCHEDULE/ACTIVITY PLAN: Phase I - TPM at VBC, September 4-5, 1992;
TPM at Niamey, September 9-11, 1991; Pre-survey and protocol
development, September 12 to October 7, 1991; Debriefing at
USAID/Niamey, October 8, 1991; Debriefing at VBC October 11, 1991.
Phase II - TPM at VBC, April 10, 1992, TPM at Niamey, April 13-14,
1992; Dry season survey, April 15 to May 18, 1992; Debriefing at
USAID/Niamey, May 9, 1992; Debriefing at VBC, May 11, 1992. Phase
III - TPM at VBC, September 4, 1992, TPM at Niamey, September 7-8,
1992; Wet season survey, September 9 - October 2, 1992. Debriefing
at USAID/Niamey, October 3, 1992; Debriefing at VBC, October 5,
1992.****PERSONNEL/SKILLS REQUIRED: 1) Malariologist; 2) Entomologist; 3)
Sociologist; and 4) Parasitologist**

PROPOSED PERSONNEL: 1) R. Ratard; 2) S. Gagarine; 3) M. Kaba; and
4) S. Ecoureima

FOLLOW-UP ACTIVITIES: Data from survey to be used in approaching donors for malaria control support and to design longitudinal studies to determine the impact of man-made changes on malaria transmission.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS:

BY WHOM:	<u>Den Carroll</u>	1991	\$30,360.00
		1992	<u>32,788.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	\$63,148.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Continuing Environmental Activity No. 81258****FY 1992****CODE 361****BUREAU: ASIA****COUNTRY: Philippines****DATE: BEGIN: Oct 1, 1991****FIELD VISIT: Dec, 1991 - Feb, 1992****END: Sep 30, 1992****ACTIVITY MANAGER:** Andre, R./Arata, A.**TITLE OF ACTIVITY:** Ricefield Vector Project (WHO/PEEM/IRRI)**ORIGIN OF ACTIVITY:** Proactive: In collaboration with WHO
(Continuing Activity No. 81258)**AUDIENCE:** Global (Based in ASIA)**LOCATION:** Philippines (and other SE Asian countries)**OBJECTIVES:** To work with WHO/PEEM and IRRI to establish a program (based at IRRI) to study interrelations of rice culture to vectors of malaria, JE, schistosomiasis, etc. Overall objective is to determine how agricultural practices can be integrated with vector control.**SCHEDULE/ACTIVITY PLAN:** Consultant selected by PEEM, and agreed upon by VBC, is to be based for three (3) months (December 1991 - February 1992) at IRRI to develop multi-year programs. VBC would provide partial costs. Report to be evaluated at PEEM meeting.**PERSONNEL/SKILLS REQUIRED:** VBC staff involved with intersectoral collaboration.**PROPOSED PERSONNEL:** a) Robert Bos, WHO/PEEM b) Andre, Arata, ID/HRD VBC Staff**FOLLOW-UP ACTIVITIES:** TBD when consultant prepares multi-year program report.**S&T CONTACT:** D. Carröll

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APPROVED:

LEVEL OF EFFORT IN DAYS: 75

BY WHOM:	<u>Deanne Carzelle</u>	1991	\$ 9,376.00
		1992	<u>74,278.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	\$83,654.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****FY 1992****Continuing Ivermectin Activity No. 81257****CODE 362****BUREAU: R&D/H****COUNTRY: Guatemala, Niger,
Cameroon, Nigeria, Burkina Faso****DATE: BEGIN: Aug 26, 1991****FIELD VISIT: Dec, 1991; Jan-Feb, 1992****END: Dec 31, 1992****ACTIVITY MANAGER: Cobey, L.****TITLE OF ACTIVITY: Development of Ivermectin Monitoring System****ORIGIN OF ACTIVITY: R&D/H (Continuing Activity No. 81257)****AUDIENCE: A.I.D./PVOs****LOCATION: U.S., Guatemala, Niger, Cameroon, Nigeria, Burkina Faso****OBJECTIVES: To develop and implement a system for monitoring and reporting on the progress of PVO efforts to improve the distribution of ivermectin in onchocerciasis endemic countries.****SCHEDULE/ACTIVITY PLAN: 1) Introduce monitoring system into each of the participating countries; 2) Hold workshops to assist each PVO and counterparts in effective participation in the monitoring effort; and 3) Train PVO and host-country personnel in data collection and use of the monitoring system.****PERSONNEL/SKILLS REQUIRED: 1) Program coordinator; 2) Health information specialist; and 3) Facilitator.****PROPOSED PERSONNEL: 1) Linda Cobey; 2) E. Kleinau; and 3) B. Silverman, and 4) VBC staff****FOLLOW-UP ACTIVITIES: Continued monitoring of program and revisions of HIS as required.****R&D CONTACT: A. Ertl**

APPROVED:

LEVEL OF EFFORT IN DAYS: 170

BY WHOM:	<u>Don CARROLL</u>	1991	\$ 56,795.00
		1992	<u>84,075.00</u>
DATE:	<u>12-31-91</u>	TOTAL COST:	\$140,870.00

7. Activities Awaiting Funding

Additional proactive proposals that could not be included in the plan because of budget constraints are listed below. Eight activities with a total budget of \$368,000 await funding, including two activities suspended because of political unrest in Haiti. With authorization from R&D/H, activities listed below will become part of the 1992 work plan if funding becomes available.

Activities Awaiting Funding Budget

Code #	Title	Budget \$
363	Development of Proposal for Economic Impact Studies in Papua New Guinea	60,000
364	LAC: Cost Analysis of Vector Control Operations	40,000
365	Translations of Malaria Training Module	30,000
366	Information and Training for PVOs on Community-Based Malaria/VBD Programs	25,000
367	Association Between Schistosomiasis Prevalence and Community Socio-Economic Factors	50,000
368	Economic Benefits of Improved Malaria Treatment in Rwanda	100,000
Suspended		
369	Haiti: Filariasis Control	30,000
370	Haiti: Monitoring Chloroquine-Resistant Falciparum Malaria	33,000
Total Activities Awaiting Funding Budget		368,000

VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 363

BUREAU: ASIA
COUNTRY: PNG
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: TBD
END: Dec 31, 1992

ACTIVITY MANAGER: Staff Epidemiologist

TITLE OF ACTIVITY: Development of Proposal for Economic Impact Studies of Malaria in PNG

ORIGIN OF ACTIVITY: Mission and PNG Institute of Medical Research request for technical assistance.

AUDIENCE: PNG govt. and research institutions, Mission, Bureau

LOCATION: PNG

OBJECTIVES: To meet with Mission, IMR and Government of PNG to determine the types of economic studies that will be most useful to them; explore the technical resources available locally to conduct studies; to select appropriate sites in which to conduct them; to develop a proposal for submission to identified funding source(s).

SCHEDULE/ACTIVITY PLAN: A 4-week reconnaissance would include: 1) meetings with the IMR and government and local institutional representatives to define the economic questions to which answers would demonstrate a need for more equitable expenditure of public sector funds on preventive services; 2) Identification of potential sites; 3) Identification of external and PNG institutional resources that might be used; 4) Development of a proposal to present to prospective donors for proposed longitudinal studies.

PERSONNEL/SKILLS REQUIRED: 1) Health economist, 2) epidemiologist, 3) agronomist

PROPOSED PERSONNEL: TBD

FOLLOW-UP ACTIVITIES: TBD

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 72

BY WHOM: _____	1991	
	1992	\$60,000.00
DATE: _____	TOTAL COST:	\$60,000.00

ACTIVITY SHEET

FY 1992

CODE 364

BUREAU: LAC
 COUNTRY: Regional
 DATE: BEGIN: Jun 1, 1992
 FIELD VISIT: TBD
 END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Cost Analysis of Vector Control Operations

ORIGIN OF ACTIVITY: Proactive

AUDIENCE: LAC, USAIDs, MOHs in LAC, A.I.D./W

LOCATION: Latin America (selected countries)

OBJECTIVES: To develop methodologies to assess the costs of various vector control measures used in Latin America including intradomiciliary wall spraying, ULV, larviciding, and environmental management. Such cost analysis methodologies are required to measure cost-effectiveness and for program planning.

SCHEDULE/ACTIVITY PLAN: 1) Plan and define control measures and data required for analysis (June); 2) Identify appropriate national programs for evaluation (July); 3) Field analysis of vector control programs and cost of interventions (Aug.-Sept.); and 4) Prepare report (Oct.-Nov.).

PERSONNEL/SKILLS REQUIRED: 1) Ten (10) years experience in vector control operations and program management; Spanish language fluency; and 2) Economist or logistics expert with vector control program experience in Latin America.

PROPOSED PERSONNEL: 1) A. Arata (VBC); and 2) Consultants (TBD)

FOLLOW-UP ACTIVITIES: Employ results in project planning, training and cost-effectiveness studies of VBDC.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 65

BY WHOM: _____	1991	
	1992	\$40,000.00
DATE: _____	TOTAL COST:	\$40,000.00

VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 365

BUREAU: Global
COUNTRY:
DATE: BEGIN: Mar 15, 1992
FIELD VISIT: None
END: Sep 30, 1992

ACTIVITY MANAGER: Arata, A./Cobey, L.

TITLE OF ACTIVITY: Translations of Malaria Training Module

ORIGIN OF ACTIVITY: Proactive

AUDIENCE: Missions, MOH in French- and Spanish-speaking countries

LOCATION: Central

OBJECTIVES: Translations into Spanish and French of the Malaria Training Module (7 units)

SCHEDULE/ACTIVITY PLAN: On completion of the individual modules (scheduled for March 1992), actions required will be: 1) identification of appropriate translators; 2) negotiate time and costs; 3) translation; 4) review and revision as required; and 5) Spanish and French translations will be done simultaneously.

PERSONNEL/SKILLS REQUIRED: Qualified translators determined by prior work and recommendations

PROPOSED PERSONNEL: TBD

FOLLOW-UP ACTIVITIES: Field use of modules

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 100

BY WHOM: _____	1991	
	1992	<u>\$30,000.00</u>
DATE: _____	TOTAL COST	\$30,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 366

BUREAU: R&D/H
 COUNTRY: Global
 DATE: BEGIN: Jan 1992
 FIELD VISIT: None
 END: Dec 1992

ACTIVITY MANAGER: Heegaard, F./Cobey, L.

TITLE OF ACTIVITY: Information and Training for PVOs on Community Based Malaria/VBD Programs

ORIGIN OF ACTIVITY: Proactive

AUDIENCE: PVO managers of community-based child survival, nutrition, MCH/FP and other health-related programs. (to be implemented in close cooperation with A.I.D.'s office of PVO support).

LOCATION: Global

OBJECTIVES: To provide PVOs the information needed to initiate and manage successful community-based programs of malaria/VBC risk-reduction programs in selected countries and regions.

SCHEDULE/ACTIVITY PLAN: 1) Identify a small target group of PVOs interested in community-based malaria/VBD program; 2) Determine their specific needs; 3) Identify training/consulting staff; 4) develop curriculum, case studies, guidance materials needed to assist PVOs; 5) Prepare and conduct a pilot workshop with the PVOs; and 6) Evaluate, modify and expand the program as appropriate.

PERSONNEL/SKILLS REQUIRED: Training, LDC community development, vector borne disease expertise

PROPOSED PERSONNEL: Cobey, Heegaard, and consultants, as needed

FOLLOW-UP ACTIVITIES: Field-based training of PVOs

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 55

BY WHOM: _____	1991	
	1992	\$25,000.00
DATE: _____	TOTAL COST:	\$25,000.00

VECTOR BIOLOGY AND CONTROL II**ACTIVITY SHEET****Environmental Activity****FY 1992****CODE 367**

BUREAU: ASIA
COUNTRY: TBD
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: Apr 1-30, 1992
END: Dec 31, 1993

ACTIVITY MANAGER: Lennox R./Andre, R.**TITLE OF ACTIVITY:** Association Between Schistosomiasis Prevalence and Community Socio-Cultural and Economic Factors**ORIGIN OF ACTIVITY:** Proactive: Jackson Foundation**AUDIENCE:** Asia Bureau; host-country MOH; USAID**LOCATION:** TBD**OBJECTIVES:** To identify a range of social and economic indicators that correlate with high and low schisto prevalence**SCHEDULE/ACTIVITY PLAN:** 1) Identify similar agricultural communities that have high and low schisto prevalence using government records; 2) Confirm prevalence rates by point previous surveys; 3) Perform community economic and social analysis using standard instruments applied by local experts; and 4) Search for correlations that impact on community prevalence rates.**PERSONNEL/SKILLS REQUIRED:** Schisto specialist/epidemiologist; social scientist; and economist**PROPOSED PERSONNEL:** Dr. John Cross; host country economist and sociologist**FOLLOW-UP ACTIVITIES:** Results to be used in future planning for schisto control in rice growing schisto prone areas.**R&D CONTACT:** A. Ertl**APPROVED:** **LEVEL OF EFFORT IN DAYS: 80**

BY WHOM: _____	1991	
	1992	<u>\$50,000.00</u>
DATE: _____	TOTAL COST:	\$50,000.00

ACTIVITY SHEET

FY 1992

CODE 368

BUREAU: AFR
 COUNTRY: Rwanda
 DATE: BEGIN: Mar 1, 1992
 FIELD VISIT: TBD
 END: June 30, 1993

ACTIVITY MANAGER: Staff Epidemiologist/Heegaard, F.

TITLE OF ACTIVITY: Economic Benefits of Improved Malaria Treatment in Rwanda

ORIGIN OF ACTIVITY: Harvard Concept Paper

AUDIENCE: AFR/TR, R&D/H, USAIDS

LOCATION: Selected province, Rwanda

OBJECTIVES: To determine: 1) whether the quality of malaria case management at health centers correlates with the disease burden; 2) whether the economic impact of malaria on the Rwandese family would be eased by providing better treatment.

SCHEDULE/ACTIVITY PLAN: Project team formation and interviewer training will occur in early 1992; six health centers will be identified and facility data collected; a household (HH) survey protocol will be developed; and mortality data from the second quarter of 1992 collected. The HH survey will be conducted during the November 1992 rainy season; preliminary results will be discussed with Rwandese officials in January 1993.

PERSONNEL/SKILLS REQUIRED: 1) Health economist; 2) Field epidemiologist; 3) Eight (8) Rwandese senior staff; 4) Twelve (12) Rwandese interviewers, and 5) Field staff and drivers.

PROPOSED PERSONNEL: D. Shepard and E. Kleinau

FOLLOW-UP ACTIVITIES: TBD

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS:

BY WHOM: _____	1991	
	1992	\$100,000.00
	1993	<u>100,000.00</u>
DATE: _____	TOTAL COST:	\$200,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 369

BUREAU: LAC
 COUNTRY: Haiti
 DATE: BEGIN: Apr 24, 1991
 FIELD VISIT: TBD
 END: Suspended until further notice

ACTIVITY MANAGER: Arata, A./Lennox R.

TITLE OF ACTIVITY: Haiti-Filariasis Control

ORIGIN OF ACTIVITY: Proactive - Tulane

AUDIENCE: USAID/Port au Prince: MOH/GOH

LOCATION: Haiti

OBJECTIVES: To reduce the Culex quinquefasciatus population to a level that effectively interrupts Wuchereria bancrofti transmission using an integrated approach to vector control.

SCHEDULE/ACTIVITY PLAN: 1991 work was completed on schedule and report on file with VBC: 1992 schedule suspended because of civil crisis in country and until clearance from USAID and R&D/H is obtained.

PERSONNEL/SKILLS REQUIRED: Medical entomology, parasitology - prior experience in Haiti: resident physician with access to community.

PROPOSED PERSONNEL: 1) Robert C. Lowrie; 2) Dr. Thomas Janousek; 3) Mr. Richard Jones (Tulane Graduate Student to accompany Dr. Lowrie for OJT); and 4) Dr. David McNeeley, Leogane, Haiti.

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 125

BY WHOM: _____	1991	\$11,732.00
	1992	<u>SUSPENDED</u>
DATE: _____	TOTAL COST:	\$41,745.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 370

BUREAU: LAC
 COUNTRY: Haiti
 DATE: BEGIN: Apr 24, 1991
 FIELD VISIT: TBD
 END: Suspended until further notice

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Monitoring Chloroquine-Resistant Falciparum Malaria/Haiti

ORIGIN OF ACTIVITY: Proactive - Tulane

AUDIENCE: USAID/Haiti and MOH (GOH)

LOCATION: Leogane Haiti

OBJECTIVES: To establish a national capability of Hôpital Sainte Croix in Leogane to conduct in vivo and in vitro tests for chloroquine-resistant falciparum malaria: to plan the inclusion of other sentinel posts in such a monitoring system.

SCHEDULE/ACTIVITY PLAN: Work was scheduled to begin in November 1991 (with high malaria transmission season). Work had not been initiated when notice was given to suspend Haiti activities due to civil crisis. Work is suspended until clearance from USAID and R&D/H is obtained.

PERSONNEL/SKILLS REQUIRED: 1) Malariologist - expertise in Cq resistance trials, malaria epidemiology; 2) Laboratory technical 3) Local physicians

PROPOSED PERSONNEL: Dr. Norbert Lanners, Ms. Maryjane Dodd, Drs. Manise McNeeley and George Leonard

FOLLOW-UP ACTIVITIES: TBD - Monitoring system may be expanded depending on results.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 58

BY WHOM: _____	1991	\$ 871.00
	1992	<u>SUSPENDED</u>
DATE: _____	TOTAL COST:	\$33,657.00

8. Requirements Contract

The VBC Project has an expanded capability to respond to specific Mission requests through a separate requirements contract. This recently developed contracting mechanism functions like an IQC in that it can only receive funds through PIO/Ts. However, unlike an IQC, the requirements contract can be used to provide services over a period of years, which may consist of a series of sequential tasks.

R&D/H has sent Missions and Bureaus guidelines for processing "buy-ins." Additional copies are available on request from Dennis Carroll, R&D/H/CD.

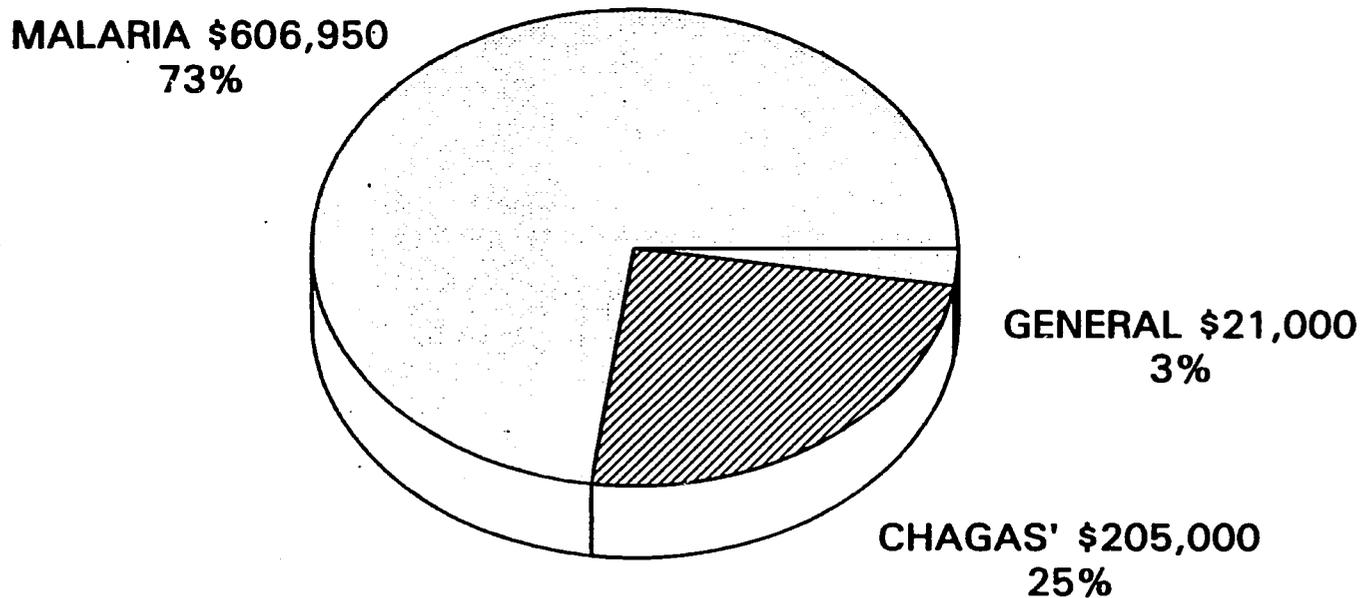
Since the beginning of the VBC II, the Project has accepted \$1,305,107 to implement 11 buy-ins. In 1992, VBC will start or continue work on 20 activities issued under eight active buy-ins with a total budget of \$832,950.

Requirements Contract Budget

Code #	Title	Budget \$
194	Pakistan: Computerized Epidemiological Database	55,000
195	Pakistan: Source Reduction/Biological Control in Baluchistan	55,150
210	Pakistan: Longitudinal Study on the Role of <i>Anopheles stephensi</i> in Malaria Transmission	121,000
157	Bolivia: Computer Analyst	40,000
159	Bolivia: Senior Consultant for Chagas' Disease Program	40,000
161	Bolivia: Community Development/Health Education - Chagas' Disease	15,000
162	Bolivia: Senior Advisors for Housing Improvement (Chagas' Control)	15,000
164	Bolivia: TA Chagas' - Housing Improvement	15,000
167	Bolivia: Pre-Evaluation Review	20,000
371	Bolivia: Analysis of Project Information and Supply Systems	10,000
372	Bolivia: Mid-Term Project Review of Chagas' Control Project	50,000

Code #	Title	Budget \$
150	Malawi: Economic Impact Analysis of Malaria	20,000
152	Malawi: Malaria KAP Survey	40,000
153	Malawi: Information, Education and Communication (IEC): Review of Existing Materials and Implementation Options for Revised Malaria IEC Materials	40,000
154	Malawi: Curriculum Modification and Development	26,000
155	Malawi: Operational Analysis: Assessment of Anti-Malaria Drug Distribution System	30,000
205	Belize: Technical Assistance to the Increased Productivity Through Better Health Project	30,300
373	LAC: Vector-Borne Disease Trend Analysis	21,000
374	Niger: Health Sector Support	94,500
375	Nepal: Assessment of the Hetauda Malaria Research and Training Center	95,000
Total Requirements Contract Budget		832,950

SUMMARY OF 1992 ACTIVITY BUDGET BY DISEASE (REQUIREMENTS CONTRACT)



VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 194
Work Order No. 10

BUREAU: APRE
COUNTRY: Pakistan
DATE: BEGIN: Sep 1, 1991
FIELD VISIT: Oct 15-Nov 22, 1991
END: Jun 30, 1992

ACTIVITY MANAGER: Silverman, B./Andre, R.

TITLE OF ACTIVITY: Pakistan: Computerized Epidemiological Database

ORIGIN OF ACTIVITY: PIO/T No. 391-0472-3-90196 (Continuing Buy-in Activity No. 82245)

AUDIENCE: Division of Malaria Control (DMOC), Ministry of Health (MOH), USAID/Islamabad

LOCATION: Pakistan

OBJECTIVES: 1) To explain framework and requisite resources for MIS development; 2) To define goals and objectives of the MIS; 3) To develop an agreed upon plan of action for developing computerized MIS; 4) To develop a prototype database for malaria surveillance data; and 5) To implement use of prototype database.

SCHEDULE/ACTIVITY PLAN: 1) Conduct Team Planning Meeting in Islamabad; 2) Conduct systems and needs analysis; 3) Hold two (2) day start-up workshop for MOH staff and USAID; 4) Develop format and forms for data collection; 5) Develop database; 6) Prepare documentation for database; 7) Train staff in use of database; 8) Implement database in Provinces; 9) Prepare draft report; and 10) Debrief and final report.

PERSONNEL/SKILLS REQUIRED: Epidemiologist and MIS Specialist

PROPOSED PERSONNEL: Scholtens, Epidemiologist and Wulfe, MIS Specialist

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 75

BY WHOM: *John Carter*

1991

1992

DATE: 12-31-91

TOTAL COST \$55,000.00
\$55,000.00

ACTIVITY SHEET

FY 1992

CODE 195
Work Order No. 10BUREAU: ASIA
COUNTRY: Pakistan
DATE: BEGIN: Apr 26, 1992
FIELD VISIT: May 1-30, 1992
END: Aug 31, 1992

ACTIVITY MANAGER: R. Andre/A. Arata

TITLE OF ACTIVITY: Source Reduction/Biological Control in Baluchistan

ORIGIN OF ACTIVITY: PIO/T No. 391-0472-3-90196 (Continuing Buy-in Activity No. 82246)

AUDIENCE: USAID/Islamabad and DOMC/GOP

LOCATION: Islamabad, Lahore and Baluchistan, Pakistan

OBJECTIVES: To assist the DOMC and USAID/Islamabad in assessing the role of source reduction/biological control in reducing malaria transmission in Baluchistan Province.

SCHEDULE/ACTIVITY PLAN: TPM at VBC, April 27-28 1992; Workshop with A.I.D., NIMRT, and the DOMC, May 4-5 1992; Assessment and operational research study in Pakistan, May 6-27 1992; Seminar and debriefing at VBC, June 1, 1992.

PERSONNEL/SKILLS REQUIRED: Vector Control Specialist.

PROPOSED PERSONNEL: Michael Carroll

FOLLOW-UP ACTIVITIES: Recommendations for malaria control in parts of Baluchistan through the use of source reduction/biological control and possible future intersectoral collaboration on water manipulation to prevent vector breeding.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 70

BY WHOM: <u>Michael Carroll</u>	1991	\$ - 0 -
	1992	55,150.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	<u>\$55,150.00</u>

VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 210

Work Order No. 12

BUREAU: ASIA
COUNTRY: Pakistan
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: Jan 3-31; Apr 3-27;
Jul 3-27; Sep 3-27, 1992
END: Sep 30, 1992

ACTIVITY MANAGER: Andre, R./Arata, A.

TITLE OF ACTIVITY: Longitudinal Study on the Role of Anopheles stephensi in Malaria Transmission in Pakistan

ORIGIN OF ACTIVITY: PIO/T No. 391-0472-3-90198 (Continuing Buy-in Activity No. 82249)

AUDIENCE: USAID/Islamabad, Pakistan - DOMC, MOH, GHS, NIMRT

LOCATION: Punjab and NWFP, Pakistan

OBJECTIVES: Determine the vector status of Anopheles stephensi in several malaria endemic villages in Punjab and NWFP, Pakistan. Determine the malaria sporozoite inoculation rate on a monthly basis in the sampled villages.

SCHEDULE/ACTIVITY PLAN: First trip in January 1992: review malaria and vector data at the DOMC, select possible study villages, write joint research protocol, initiate training, and implement study. Second trip in April 1992: review data, observe field collections, summarize research progress, implement necessary changes in study design. Third trip in July 1992: review data, observe field collections, summarize research progress. Fourth trip in September 1992: review data, observe field collections, summarize research.

PERSONNEL/SKILLS REQUIRED: Two (2) medical entomologists

PROPOSED PERSONNEL: Dr. Dick Baker (Vero Beach Lab); Dr. Bill Reisen (Univ. of California)

FOLLOW-UP ACTIVITIES: Complete study of these two provinces in November 1992 and submit final report and publish scientific paper.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 120

BY WHOM: <u>Alan Carroll</u>	1991	\$ - 0 -
DATE: <u>12-31-91</u>	1992	<u>121,000.00</u>
	TOTAL COST:	\$121,000.00

ACTIVITY SHEET

FY 1992

CODE 157

Work Order No. 6

BUREAU: LAC

COUNTRY: Bolivia

DATE: BEGIN: Dec 18, 1990

FIELD VISIT: Full-time in La Paz

END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Computer Analyst for Bolivia Chagas' Control Program

ORIGIN OF ACTIVITY: PIO/T No. 511-0594-3-00069 (Continuing Buy-in Activity No. 82234)

AUDIENCE: USAID/ La Paz, CCH Project - Chagas' Component, MOH/GOB

LOCATION: La Paz

OBJECTIVES: To develop and maintain a computerized database for all components (epidemiological, vector control, housing modifications, etc.) of Chagas' control program; to provide analysis of data for program planning, interim decision making, monitoring and evaluation of results.

SCHEDULE/ACTIVITY PLAN: a) Full-time in 1991 and 1992; b) activities scheduled in La Paz by the director of the CCH Project and USAID/TACS and reviewed by activity managers on regular visits.

PERSONNEL/SKILLS REQUIRED: Skilled data management specialist; Bolivian or resident of Bolivia; 10 years experience in H/MIS and/or related systems; capability to train field and office personnel in data management and office systems management.

PROPOSED PERSONNEL: Juan Carlos Lea Plaza

FOLLOW-UP ACTIVITIES: Preparation of reports of CCH Chagas' program

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS:

BY WHOM: <u>Juan Carlos Lea Plaza</u>	1991	\$27,000.00
	1992	40,000.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	\$67,000.00

VECTOR BIOLOGY AND CONTROL II**155****ACTIVITY SHEET****FY 1991****CODE 159****Work Order No. 6**

BUREAU: LAC
COUNTRY: Bolivia
DATE: BEGIN: Feb 1, 1991
FIELD VISIT: TBD
END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A.**TITLE OF ACTIVITY:** Senior Consultant for Chagas' Disease Program**ORIGIN OF ACTIVITY:** PIO/T No. 511-0594-3-00069 (Continuing Buy-in Activity No. 82235)**AUDIENCE:** USAID/La Paz and MOH/GOB**LOCATION:** La Paz, Bolivia**OBJECTIVES:** To provide continued TA to Bolivian national Chagas' disease control program team**SCHEDULE/ACTIVITY PLAN:** At request of USAID/LaPaz**PERSONNEL/SKILLS REQUIRED:** Medical entomologist: previous experience in leadership of Chagas' control program; Spanish speaking**PROPOSED PERSONNEL:** Tonn, Robert and/or VBC Staff (A. Arata)**FOLLOW-UP ACTIVITIES:****R&D CONTACT:** A. Ertl**APPROVED:****LEVEL OF EFFORT IN DAYS:** 60

BY WHOM: <u>Jan Carroll</u>	1991	\$ 85,000.00
	1992	40,000.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	<u>\$125,000.00</u>

ACTIVITY SHEET

FY 1992

CODE 161

Work Order No. 6

BUREAU: LAC
 COUNTRY: Bolivia
 DATE: BEGIN: May 10, 1991
 FIELD VISIT: TBD
 END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Community Development/Health Education - Chagas' Disease

ORIGIN OF ACTIVITY: PIO/T No. 511-0594-3-00069 (Continuing Buy-in Activity No. 82230)

AUDIENCE: USAID/La Paz Chagas' Control CCH/Bolivia; MOH

LOCATION: La Paz, Bolivia

OBJECTIVES: To develop with CCH national Chagas' staff appropriate methods and levels of health education to support the community development component of the field interventions aimed at local housing improvements.

SCHEDULE/ACTIVITY PLAN: As requested by USAID/La Paz.

PERSONNEL/SKILLS REQUIRED: Social scientist (Latin American) who has worked with community health education in relation to Chagas' disease control. Extensive field experience.

PROPOSED PERSONNEL: Briceño-Leon, Dr. Roberto or Gonzalez-Tellez, Silverio

FOLLOW-UP ACTIVITIES: TBD

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 60

BY WHOM: <u>Don Chazell</u>	1991	\$ 8,100.00
	1992	15,000.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	\$23,100.00

VECTOR BIOLOGY AND CONTROL II**157****ACTIVITY SHEET****FY 1992****CODE 162**
Work Order No. 6**BUREAU:** LAC
COUNTRY: Bolivia
DATE: BEGIN: May 21, 1992
FIELD VISIT: TBD
END: Dec 31, 1992**ACTIVITY MANAGER:** Arata, A.**TITLE OF ACTIVITY:** Senior Advisors for Housing Improvement (Chagas' Control)**ORIGIN OF ACTIVITY:** PIO/T No. 511-0594-3-069 (Continuing Buy-in Activity No. 82231)**AUDIENCE:** USAID/La Paz; CCH/La Paz; MOH/GOB**LOCATION:** La Paz, Bolivia**OBJECTIVES:** To review the overall epidemiological database and objectives of the Bolivian program and make recommendations on management and planned interventions: also review of housing improvement activities related to Chagas' disease.**SCHEDULE/ACTIVITY PLAN:** Meetings with USAID and national Chagas' team members in La Paz and Cochabamba: as requested by USAID/La Paz**PERSONNEL/SKILLS REQUIRED:** 1) Epidemiologist with experience in management of national Chagas' control program in Latin American country; Spanish-speaking. 2) Health educator with field experience in Chagas' control programs and Spanish-speaking.**PROPOSED PERSONNEL:** Dr. Joao Carlos Pinto Dias, Lic. Mauricio Phelan, Dr. Rafael Cedillos or Dr. Antonio D'Alessandro**FOLLOW-UP ACTIVITIES:** Implementation of recommendations.**R&D CONTACT:** A. Ertl**APPROVED:****LEVEL OF EFFORT IN DAYS:** 34

BY WHOM: <u>Jim Carroll</u>	1991	\$ 7,000.00
	1992	15,000.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	<u>\$22,000.00</u>

ACTIVITY SHEET

FY 1992

CODE 164
Work Order No. 6BUREAU: LAC
COUNTRY: Bolivia
DATE: BEGIN: May 21, 1991
FIELD VISIT: TBD
END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: TA Chagas/Bolivia - Housing Improvement

ORIGIN OF ACTIVITY: PIO/T No. 511-0594-3-00069 (Continuing Buy-in Activity No. 82233)

AUDIENCE: USAID/La Paz, MOH/GOB, collaborating PVOs, other donors

LOCATION: La Paz, Cochabamba, Sucre (Bolivia)

OBJECTIVES: Provide technical assistance to national Chagas' control team, especially resident architect, on low cost mud-brick (adobe) house construction and improvement for vector control.

SCHEDULE/ACTIVITY PLAN: As requested by USAID/La Paz.

PERSONNEL/SKILLS REQUIRED: Environmental engineer/architect specializing in house construction with local materials: considerable experience in developing countries: some Spanish capability.

PROPOSED PERSONNEL: Mr. Paul G. McHenry, Jr., or equivalent specialist

FOLLOW-UP ACTIVITIES: TBD: Local Chagas' team has produced a Spanish manual on housing construction. VBC may consider an English edition:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 34

BY WHOM: <u>Jan Charles</u>	1991	\$20,000.00
	1992	15,000.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	\$35,000.00

VECTOR BIOLOGY AND CONTROL II**159****ACTIVITY SHEET****FY 1992****CODE 167**
Work Order No. 6**BUREAU:** LAC
COUNTRY: Bolivia
DATE: BEGIN: Aug 2, 1991
FIELD VISIT: TBD
END: Dec 31, 1992**ACTIVITY MANAGER:** Arata, A.**TITLE OF ACTIVITY:** Pre-evaluation Review of CCH Chagas' Control Program**ORIGIN OF ACTIVITY:** PIO/T No. 511-0594-3-00069 (Continuing Buy-in Activity No. 82236)**AUDIENCE:** USAID/La Paz, MOH/GOB; CCH/La Paz**LOCATION:** La Paz and field sites**OBJECTIVES:** To review status of national team, selected field sites and forthcoming consultant needs of CCH Chagas' control project during second year of operation, and plan mid-term review.**SCHEDULE/ACTIVITY PLAN:** On request of USAID/La Paz.**PERSONNEL/SKILLS REQUIRED:** Program planner; disease ecology; experience in preparation of EA documentation; Spanish speaking**PROPOSED PERSONNEL:** A. Arata, VBC**FOLLOW-UP ACTIVITIES:** Development of mid-term evaluation and future TA needs.**R&D CONTACT:** A. Ertl**APPROVED:****LEVEL OF EFFORT IN DAYS:** 27

BY WHOM: <u>John Carroll</u>	1991	\$14,000.00
	1992	20,000.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	<u>\$34,000.00</u>

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VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 371
Work Order No. 6

BUREAU: LAC
COUNTRY: Boliva
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: TBD
END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Analysis of Project Information and Supply Systems

ORIGIN OF ACTIVITY: PIO/T No. 511-0594-3-00069

AUDIENCE: USAID/La Paz; CCH Project; MOH/GOB

LOCATION: La Paz, Bolivia

OBJECTIVES: To assist in organization and analysis of multi-sectoral data and organization of economic and logistic data and supply network.

SCHEDULE/ACTIVITY PLAN: As requested by USAID/La Paz

PERSONNEL/SKILLS REQUIRED: Systems analyst or logistics specialist

PROPOSED PERSONNEL: Wulfe, Martin and VBC Staff

FOLLOW-UP ACTIVITIES: TBD

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 20

BY WHOM:	<u><i>John Caspell</i></u>	1991	\$ - 0 -
		1992	10,000.00
		1993	- 0 -
DATE:	<u>12-31-91</u>	TOTAL COST:	<u>\$10,000.00</u>

VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 372
Work Order No. 6

BUREAU: LAC
COUNTRY: Bolivia
DATE: **BEGIN:** Jan 1, 1992
FIELD VISIT: Apr/May 1992
END: Dec 31, 1992

ACTIVITY MANAGER: Arata, A.

TITLE OF ACTIVITY: Mid-Term Project Review of Chagas' Control Project

ORIGIN OF ACTIVITY: PIO/T No. 511-0594-3-0069

AUDIENCE: USAID/La Paz, CCH Project, MOH/GOB

LOCATION: LaPaz, Bolivia

OBJECTIVES: Evaluate progress to date and recommend course corrections, as required.

SCHEDULE/ACTIVITY PLAN: Team planning meeting in country - two (2) days; Evaluation - two (2) weeks - April/May 1992

PERSONNEL/SKILLS REQUIRED: Experience in A.I.D. project reviews; most should have experience in Chagas' disease or other VBD control, Spanish capability desirable.

PROPOSED PERSONNEL: Arata (VBC) and consultants: J. C. Pinto Dias, R. Briceño-Leon, A. D'Alessandro and B. Liese

FOLLOW-UP ACTIVITIES: Implementation of recommendations under PIO/T

R&D CONTACT: A. Ertl

APPROVED: **LEVEL OF EFFORT IN DAYS:** 100

BY WHOM: <u>Ann Carroll</u>	1991	\$ - 0 -
	1992	50,000.00
	1993	<u>- 0 -</u>
DATE: <u>12-31-91</u>	TOTAL COST:	\$50,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 150
Work Order No. 3BUREAU: AFR
COUNTRY: Malawi
DATE: BEGIN: Aug 1, 1991
FIELD VISIT: TBD
END: Dec 31, 1992

ACTIVITY MANAGER: Lennox, R./Silverman, B.

TITLE OF ACTIVITY: Economic Impact Analysis of Malaria

ORIGIN OF ACTIVITY: PIO/T No. 612-0231-3-00013 (Continuing Buy-in Activity No. 82239)

AUDIENCE: Malawi MOH, USAID/Malawi, R&D/H, CDC

LOCATION: Malawi

OBJECTIVES: To research and prepare a report that illustrates the present and future health and economic impact of malaria in Malawi.

SCHEDULE/ACTIVITY PLAN: The field visit will be coordinated with CDC long-term malaria advisor and AIDSSTech consultant assignment if possible.

PERSONNEL/SKILLS REQUIRED: Health Economist

PROPOSED PERSONNEL: VBC Consultant/M. Ettling

FOLLOW-UP ACTIVITIES: None planned.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 36

BY WHOM: <u>Lennox Silverman</u>	1991	\$ 4,500.00
	1992	20,000.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	\$24,500.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 152

Work Order No. 3

BUREAU: AFR
 COUNTRY: Malawi
 DATE: BEGIN: Sep 1, 1991
 FIELD VISIT: 1st - TBD
 END: Dec 31, 1993

ACTIVITY MANAGER: Lennox, R./Silverman, B.

TITLE OF ACTIVITY: Malaria KAP Survey

ORIGIN OF ACTIVITY: PIO/T No. 612-0231-3-00013 (Continuing Buy-in Activity No. 82240)

AUDIENCE: Malawi MOH, USAID/Malawi, R&D/H, CDC

LOCATION: Malawi

OBJECTIVES: To assist with development of methodology, sequential conduct of surveys and the final evaluation of surveys.

SCHEDULE/ACTIVITY PLAN: Two field visits will occur in 1992.

PERSONNEL/SKILLS REQUIRED: Medical Anthropologist

PROPOSED PERSONNEL: VBC Consultant/A. Fleuret

FOLLOW-UP ACTIVITIES:

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 56

BY WHOM: <u><i>Jim Carroll</i></u>	1991	\$ 3,000.00
	1992	40,000.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	\$43,000.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 153
Work Order No. 3BUREAU: AFR
COUNTRY: Malawi
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: TBD
END: Dec 31, 1993

ACTIVITY MANAGER: Lennox, R./Silverman, B.

TITLE OF ACTIVITY: Information, Education and Communication (IEC):
Review of Existing Materials and Implementation Options for Revised
Malaria IEC MaterialsORIGIN OF ACTIVITY: PIO/T No. 612-0231-3-00013 (Continuing Buy-in
Activity No. 82241)

AUDIENCE: Malawi MOH, USAID/Malawi, R&D/H, CDC

LOCATION: Malawi

OBJECTIVES: 1) Review existing country IEC materials. 2) Design
and field test additional materials.SCHEDULE/ACTIVITY PLAN: There are 3 separate field visits
associated with this activity to be conducted in collaboration with
CDC long-term malaria advisor and short-term consultant: Two in
1992 and one in 1993.

PERSONNEL/SKILLS REQUIRED: IEC Specialist

PROPOSED PERSONNEL: Jackson Foundation/I. Jacoby

FOLLOW-UP ACTIVITIES: .

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 45

BY WHOM: <u>Jim Carroel</u>	1991	\$ - 0 -
	1992	40,000.00
	1993	<u>14,300.00</u>
DATE: <u>12-31-91</u>	TOTAL COST:	\$54,300.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 154

BUREAU: Africa
 COUNTRY: Malawi
 DATE: BEGIN: Jan 1, 1992
 FIELD VISIT: 1st - TBD

END: Dec 31, 1992

ACTIVITY MANAGER: Lennox, R./Silverman, B.

TITLE OF ACTIVITY: Training: Curricula Modification and Development

ORIGIN OF ACTIVITY: PIO/T No.: 612-0231-3-00013 (Continuing Activity No. 82242)

AUDIENCE: Malawi MOH, USAID/Malawi, R&D/H, CDC

LOCATION: Malawi

OBJECTIVES: To assess present training curricula at all levels of the MOH/HSD system and modify them, as appropriate, to meet objectives of new five (5) year National Plan of Action.

SCHEDULE/ACTIVITY PLAN: Two field visits associated with this activity are scheduled for 1992: Specific dates will be communicated by the MOH through USAID/Lilongwe.

PERSONNEL/SKILLS REQUIRED: Health Educator

PROPOSED PERSONNEL: USUHS Subcontractor/B. Collins

FOLLOW-UP ACTIVITIES: A third field visit is expected to occur in 1993.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS:

BY WHOM: <u>John Carroll</u>	81	\$
	82	40,135.00
DATE: <u>12-31-91</u>	TOTAL COST:	\$40,135.00

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 155
Work Order No. 3BUREAU: AFR
COUNTRY: Malawi
DATE: BEGIN: Jan 1, 1992
FIELD VISIT: 1st quarter 1992 & TBD
END: Dec 31, 1993

ACTIVITY MANAGER: Lennox, R./Silverman, B.

TITLE OF ACTIVITY: Operational Analysis: Assessment of Anti-Malaria Drug Distribution System

ORIGIN OF ACTIVITY: PIO/T No. 612-0231-3-00013 (Continuing Buy-in Activity No. 82243)

AUDIENCE: Malawi MOH, USAID/Malawi, R&D/H, CDC

LOCATION: Malawi

OBJECTIVES: 1) To assess overall efficiency of the anti-malarial distribution system. 2) To recommend ways to improve the system with attention to the operational potential of the private sector.

SCHEDULE/ACTIVITY PLAN: The first of three (3) visits is expected to occur in the first quarter of 1992. Specific dates will be communicated by the MOH through USAID/Lilongwe.

PERSONNEL/SKILLS REQUIRED: Medical Logistician

PROPOSED PERSONNEL: Consultant - Sam Haight

FOLLOW-UP ACTIVITIES: Two more field visits associated with this activity will be scheduled during 1992-93.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 40

BY WHOM: <u>John Casareo</u>	1991	\$ - 0 -
	1992	30,000.00
	1993	<u>20,200.00</u>
DATE: <u>12-31-91</u>	TOTAL COST:	\$50,200.00

VECTOR BIOLOGY AND CONTROL II

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ACTIVITY SHEET

FY 1992

CODE 205
Work Order No. 8

BUREAU: LAC
COUNTRY: Belize
DATE: BEGIN: Nov 5, 1991
FIELD VISIT: Nov, 1991
END: Apr 30, 1992

ACTIVITY MANAGER: Heegaard, F./Arata, A.

TITLE OF ACTIVITY: Belize - Technical Assistance to Increase Productivity through Better Health Project

ORIGIN OF ACTIVITY: PIO/T No. 505-0018-3-90121 (Continuing Buy-in Activity No. 82248)

AUDIENCE: A.I.D. Mission, Ministry of Health, Belize

LOCATION: Belize

OBJECTIVES: 1) To carry out baseline assessments; 2) To design and implement a study tour for Belizian officials in Central American countries; and 3) To plan and carry out a policy dialogue meeting.

SCHEDULE/ACTIVITY PLAN: Phase 1. To carry out, with the consultant Dr. Michael Carroll, in cooperation with the WASH TDY staff, USAID/Belize and the GOB, a survey of the institutional and vector control needs. Phase 2. To design and implement, in cooperation with the WASH institutional specialist, a study tour for BOG senior officials concerned VBD and W/S. Phase 3. To arrange a policy seminar with VBD and W/S officials based on information gathered in Phase 1 and 2 above.

PERSONNEL/SKILLS REQUIRED: Institutional development, vector-borne disease expertise

PROPOSED PERSONNEL: Flemming Heegaard, Michael Carroll

FOLLOW-UP ACTIVITIES: TBD

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 40

BY WHOM: <u> <i>Deni Carroll</i> </u>	1991	\$30,300.00
	1992	30,300.00
	1993	<u> - 0 - </u>
DATE: <u> 12-31-91 </u>	TOTAL COST:	\$60,600.00

ACTIVITY SHEET

FY 1992

CODE 373

Work Order No. 1

BUREAU: LAC
 COUNTRY: Regional
 DATE: BEGIN: Sep 30, 1989
 FIELD VISIT: None
 END: Dec 31, 1992

ACTIVITY MANAGER: Silverman, B./Arata, A.

TITLE OF ACTIVITY: LAC Vector-Borne Disease Trend Analysis

ORIGIN OF ACTIVITY: PIO/T No. 598-0657-3-9653400 and PIO/T No. 597-0027-3-965330 (Continuing Buy-in Activity No. 82125)

AUDIENCE: LAC Bureau and Missions

LOCATION: VBC

OBJECTIVES: To provide annual updates to the VBC/LAC Vector Borne Disease Analysis of trends in disease prevalence, programmatic issues, expenditures and progress in regional control programs.

SCHEDULE/ACTIVITY PLAN: 1) Provide annual update for each of the three years. 2) Provide annual assessment of progress in program implementation.

PERSONNEL/SKILLS REQUIRED: 1) Program Manager; 2) Computer analyst; and 3) Research Assistant

PROPOSED PERSONNEL: Drs. Arata and Silverman. Barbara Guynn and consultants - TBD.

FOLLOW-UP ACTIVITIES: Development of a LAC Regional VBDC Strategy.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 59

BY WHOM: <u>John Carneal</u>	1991	\$ 9,000.00
	1992	21,000.00
	1993	- 0 -
DATE: <u>12-31-91</u>	TOTAL COST:	<u>\$30,000.00</u>

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

169

FY 1992

CODE 374
Work Order No. 11

BUREAU: AFR
COUNTRY: Niger
DATE: BEGIN: Sep 4, 1991
FIELD VISIT: Phase II
Jan 17 - Feb 18, 1992
END: Jun 30, 1992

ACTIVITY MANAGER: R. Andre

TITLE OF ACTIVITY: Niger Health Sector Support

ORIGIN OF ACTIVITY: PIO/T No. 683-0254-3-71078 (Continuing Buy-in Activity No. 82247)

AUDIENCE: USAID/Niamey; MOH/GON

LOCATION: Niamey, Gaya, Tessaoua and Aderbissinat, Niger

OBJECTIVES: 1. Develop a standardized methodology, suitable for health care workers, for the collection of epidemiological data on malaria. 2. Collect data on the incidence and nature of malaria in Niger through seasonal baseline surveys of sentinel sites; in parallel, determine the entomological properties of vector transmission of malaria.

SCHEDULE/ACTIVITY PLAN: Phase II - TPM at VBC, January 15-16, 1992, TPM at Niamey, January 20-22, 1992; Dry season survey, January 23 to February 1992; Debriefing at USAID/Niamey, February 18, 1992; Debriefing at VBC, February 21, 1992.

PERSONNEL/SKILLS REQUIRED: 1) Malariologist; 2) Entomologist; 3) Sociologist; 4) Parasitologist

PROPOSED PERSONNEL: 1) R. Ratard; 2) S. Gagarine; 3) M. Kaba; and 4) S. Boureima

FOLLOW-UP ACTIVITIES: Data from survey to be used in approaching donors for malaria control support and to design longitudinal studies to determine the impact of man-made changes on malaria transmission.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 253

BY WHOM: Dr. Charles 1991 \$ 30,500.00
1992 94,500.00
DATE: 12-31-91 **TOTAL COST:** \$125,000.00

1992 Work Plan

VECTOR BIOLOGY AND CONTROL II

ACTIVITY SHEET

FY 1992

CODE 375

Work Order No. TBD

BUREAU: ASIA
 COUNTRY: Nepal
 DATE: BEGIN: Mar 15, 1992
 FIELD VISIT: Mar 20-Apr 10, 1992
 END: Jun 30, 1992

ACTIVITY MANAGER: Andre, R.

TITLE OF ACTIVITY: Assessment of the Hetauda Malaria Research and Training Center

ORIGIN OF ACTIVITY: PIO/T No. TBD

AUDIENCE: USAID/Kathmandu; MOH/GON; MCD/GON; GHS/GON

LOCATION: Kathmandu, Hetauda; Nepal

OBJECTIVES: 1) Determine required laboratory equipment and supplies for the MRTC laboratories and insectary. 2) Review the staff situation and make recommendations on total manpower required to run the MRTC. 3) Develop revisions to curriculum at the MRTC.

SCHEDULE/ACTIVITY PLAN: Team planning meeting at VBC March 16-17, 1992; Carry out assessment in Kathmandu and Hetauda, March 20 - April 6, 1992; Submit report and USAID/Kathmandu, MOH, and the MCD on April 9, 1992; Debrief at VBC on April 14, 1992.

PERSONNEL/SKILLS REQUIRED: Epidemiologist; Medical entomologist; and Parasitologist/Virologist

PROPOSED PERSONNEL: Uwe Brinkmann; Richard Andre; John Cross

FOLLOW-UP ACTIVITIES: Incorporate VBC Malaria Training Module into future training at the MRTC.

R&D CONTACT: A. Ertl

APPROVED:

LEVEL OF EFFORT IN DAYS: 80

BY WHOM:

John Carroll

1991

\$ - 0 -

1992

95,00.00

1993

- 0 -

DATE:

12-31-91

TOTAL COST:

\$95,000.00