PD-ACB-902

WORLDWIDE TECHNICAL ASSISTANCE AND RESEARCH TAB FY 1976-77 PROGRAM SUBMISSION

Office of Health

Narrative Set

June 1975

Agency for International Development

BEST AVAILABLE

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OFFICE OF HEALTH

Program Submission FY 75

Introduction

The TA/H Program has been designed to meet the intent of Section 104, "Population, Planning and Health" which authorizes action in four related areas even though program administration is implemented in offices other than TA/H (e.g. PHA/POP and Regional Bureaus). These related areas are:

(1) To increase opportunities and motivation for family planning

(2) To reduce the rate of population growth

(3) To prevent and combat disease

(4) To help provide health services for the great majority

The content of TA/H programs takes into account the role of TAB in research, development and staff advisory assistance. The 1976 program also takes into account the need to match TA/H services to regional bureaus and field programs. In this context, five health-related elements of the total AID health program as practiced in the field are:

(1) Development of health delivery systems for more efficient extension of population, nutrition and elementary maternal and child health services to the majority in developing countries (KPA 11).

(2) Improvement of health planning capability in order to promote more effective distribution of resources in a developing country. (KPA 12)

(3) Improvement in environmental health and the correction of environmental hazards which, in developing countries, create the major disease risks for the poor majority (KPA 13).

(4) Reduction of malnutrition. Section 103 authorizes the "alleviation of malnutrition", a problem that cannot be resolved in developing countries without addressing the causes of malnutrition in tropical climates such as poor sanitation, infectious disease, and absence of basic maternal and child care. Nutrition is, after all, the biological energy exchange status of the human body. The four regional bureaus consider nutrition as an element of their regional health activities. TAB support is managed through TA/N. In the TA/H program, KPAs 11, 12 and 13 all contribute to the resolution of the malnutrition issue.

(5) Reduction of the rate of population growth. Although PHA/POP manages the population program, the influence of excessive human reproduction is so important to human health that it cannot be conceived as an activity unrelated to health, a viewpoint most recently stressed in the Senate Appropriations Committee report of March 1975. The health of mothers and children cannot be improved without effective population control. TA/H, in KPAs #11 and #12, seeks to extend services and resources in ways to improve the availability of population services to the poor majority.

The above five elements are emphasized in the content of TA/H advisory assistance since regional bureaus and field missions express the need for program coordination, even though funding sources may differ.

KPA 11 Health Delivery Systems

The Agency-wide demand for delivery system projects increased from 3 in 1972 to an anticipated 24 in 1976. The DEIDS program has been catalytic in achieving this progress. For this reason, it is anticipated that it may not be necessary to develop additional centrally funded DEIDS programs other than Thailand and Ecuador. The Colombia program is a closely related evaluation activity. MEDEX, the APHA voluntary agency activity, and the AHA activity are directly supportive of the goal of extending health services to the rural poor. The KPA program is directly contributory to improving the life of the poor majority, to increase social equity, and to improve the quality of life for women. Two new activities are related to (1) the improvement of world-wide field experience through data collection from existing field programs (Christian Medical Council) and (2) better teaching and communication through the Harvard project.

KPA 12 Health Planning

The Agency is helping prepare 27 national health plans for sector analyses, up from 4 in 1973. In support of these regional bureau and field efforts, TA/H has the responsibility to provide training for planners (University of Michigan and Johns Hopkins) and to provide back-up technical assistance support to regional bureaus in a wide range of planning activity (OIH/RSSA). Cooperative programs with TA/DA seeks to strengthen the managerial system through evaluation and training.

The state of the art on national health planning in relation to development planning is relatively new. Regional conferences and guidelines

are important elements in disseminating present knowledge. In a new field, research on cost-effectiveness is essential for guidance. However, the main thrust of TA/H program and budget support is toward building LDC strength in institutional planning capability.

Health budgets in LDCs barely exceed 3% of the GNP. Maldistribution of resources is characteristic. Wise distribution of scarce resources for the benefit of the poor majority is the hoped for gain by this activity and the objective of Congressional intent.

KPA 13 Environmental Health

In order to respond to the Congressional Mandate "to prevent and combat disease" in the context of the poor majority in the LDCs, AID must address the most critical and prevalent health problem facing the majority. In the LDCs the specific disease problem emerged from a common base of water-borne or water-based diseases such as intestinal infections (which, in turn, precipitate malnutrition), cholera, schistosomiasis (600 million) and malaria (100 million). Man creates much of the problem by migration and careless agricultural and public works development programs which alter the physical environment in ways conducive to disease transmission.

In the past, TA/H has focused on problem definition, consultation and technical advisory assistance. TAB is now being asked to provide technical leadership in schistosomiasis control, consequent to Mr. Kissinger's U.N. speech. The NESA bureau is requesting transfer of the DACCA Cholera

Research Laboratory to TAB in 1977. The UNDP-convened consultative group on rural water supply is calling a meeting in 1975 to discuss new means to provide and extend water supply to the rural majority. These demands place stress on TA/H staff and resources. The Agency is not staffed adequately, either in Washington or in the field, to undertake the additional environmental program load. TA/H has sought collaborative arrangements with SER/Eng, TA/OST, OIH/HEW, and WHO. While TA/H perspective is to apply existing knowledge and technology in environmental programs, the Congressional Mandate to reach the poor majority requires intensive reexamination of existing technology. Accordingly, research emphasis is directed towards that end.

As a final overall perspective, TA/H strongly supports the view that the level of health of the population is the ultimate consequence of its own total social and economic development effort. Health problems cannot be resolved for a majority by traditional health technologies alone. In providing consultation to the region and field, the importance of political support and cooperation with other development sectors has always been stressed. Multi-disciplinary dialogue at the Washington level has never been adequate, particularly between such key sectors as agriculture, health and education. The relationship between these sectors are more easily defined under the specific circumstances which face a country program. For this reason, TA/H allocates approximately 30% of its staff time each year to field consultation where it can actively participate in an interdisciplinary approach to national problems.

Program Funding

The following chart provides CP totals and NEED totals for FY 76 and FY 77:

KPA	FY 76 CP	FY 76 NEED	Interim Qtr CP	Interim Qtr NEED	FY 77 CP	FY 77 NEED
#11	x 917 2778 3695	x 590 2546 3136	x 220 640 860	x 167 533 700	x 781 2452 3233	x 781 2506 3287
#12	x 200 1651 1851	x 200 1632 1832	790 790	900 900	x 200 1801 2001	x 200 2045 2245
#13	2054	3332	350	270	2366	7245
Totals	7600	8300	2000	1820	7600	12777

At the request of TA/PPU we have submitted a budget at the CP level of 7.6 million but our need to support the growing demand for support from bureaus and Missions and expanding R&D efforts to support field programs creates needs of 8.3 million. In FY 1977, we again start with a CP figure of $7.6 million at TA/PPU's request but actual need is $12.777 million. The major expansion in the FY 77 program is for the Cholera Research Laboratory (CRL) ($2.2 million),

and programs for schistosomiasis ($1.5 million). The CRL activity is merely a transfer from NESA Bureau to TAB. The schistosomiasis activity was brought about by the new interest initiated by the Secretary's speech to the General Assembly of the United Nations in 1974.

The need for growth of centrally funded activity in health can also be illustrated with a comparison of Field and centrally funded population and health activities for FY 1976:

	($ millions) Population	Health
Field	$ 48.8	$ 59.5
UNFPA	21.0	
Central Funding	65.9	6.3
Total	$ 135.7	$ 65.8

While the UNFPA and Central Funding for Population have significant elements that are directly supportive of field programs, the comparison noted in these figures is interesting and adds strength to the proposed increase in funds for centrally funded health R & D efforts. Expansion of health activities create a need for more personnel. Therefore, we will be forwarding a modest request for increase in our ceiling for direct hire employees (4) and consultants. To illustrate, the Office of Health had a maximum of sixteen professional staff members on board during FY 1975 who worked a total of 176 man-months. We estimate that approximately 1/3 or 58 months, of available manpower was directed to support of regional bureau and mission programs. This is consistent with our records for

7.

actual support provided during FY 1973 and 1974. We estimate that the balance of professional time is approximately evenly divided between staff and administrative functions and the development, management and monitoring of central projects or 59 man-months for each of these activities.

If we have our currently authorized staff on board during the full year of 1976, 180 man-months of professional manpower will be available. At least five of the fifteen professionals will be new to the Office of Health and there are likely to be other changes during the year. The combination of consultants, personnel provided through resource and contract agreements and direct hire personnel will provide the minimal requirements for support of AID's health programs.

2. KPA #11 Discussion

The Foreign Assistance Act of 1973, Section 102 (b)(5) states "The United States bilateral development assistance should give the highest priority to undertakings submitted by host governments which directly improve the lives of the poorest of their people and their capacity to participate in the development of their country." Provision of health services is a mechanism which is acceptable socially and politically for providing social equity.

An identified constraint to the provision of health services to the poor majorities of developing countries is the absence of health delivery systems in the LDC's which can reach the majority (usually rural) populations. The existing systems are modeled after western systems and are incapable of providing services within the resources available to the LDC's. KPA response was developed to test the hypothesis that it is feasible to develop innovative approaches to extend and improve health care delivery emphasizing maternal and child health, nutrition, and family planning services, to a majority of less developed country peoples, particularly women of child bearing age and children under five, at costs acceptable (affordable) to the LDC's involved.

As part of this approach, this activity initially intended through a project , DEIDS (Development and Evaluation of Integrated Delivery Systems) to develop and test a guidance plan for the development and evaluation of low-cost health delivery systems in at least four countries, compare experience with similar experiments elsewhere, and derive an approach that would have application in many LDC's.

The current thinking is that this activity will implement such interregional prototype pilot programs for the development and evaluation of affordable health delivery systems in only up to two countries, and technically support (but not implement) similar efforts in development and evaluation of low-cost health delivery systems upon request from the Regional Bureaus. This is because Agency and LDC interest in the concepts of affordable health delivery systems have overtaken the original plan, and many similar projects have been planned and implemented by the Regional Bureaus which make additional TAB funded demonstrations unnecessary.

In addition, this activity seeks: to assist policy makers, administrators, educators and providers of health services in the development of affordable high population coverage delivery systems through innovative and more effective use of manpower, (MEDEX); incorporation of the private and traditional sector into the system; planning and management of health resources; and strengthening the health components of organizations, private and public, which reach the largely rural poor majorities in the LDC's. Teaching teachers of paramedics how to teach is an example.

Through a variety of contracts, RSSA's and university agreements, TA/H supports the increasing number of affordable health delivery projects being developed by the regional bureaus. Additionally, TAB has worked with PHA on developing private and voluntary organization (PVO) capabilities in this area of endeavor. Consultations with international and voluntary health organizations, including WHO and the

Christian Medical Commission, have developed a commonality of purpose in promoting the concept of low-cost systems for the majority.

Results of these efforts require continued evaluation; mechanisms which permit evaluation at the local, national and international levels still need to be developed and disseminated. Another gap not completely addressed to date is a "State-of-the-Art" analysis on an international scale. Research, primarily in the social areas related to motivation must be carried out. To accomplish these, a network(s) for affordable health delivery systems will be established at the national (U.S.) level, and hopefully, at the international level under the WHO mantle.

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Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document: PROP
Proposed Date of Submission: 5/6/75

3. Project Number

4. Bureau Code: TAB 06

5. Project Title
A. MEDEX
B.

6. Estimated Initial/Final Obligation
FY 76 FY 79

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = ____)
AID Approp. 2596
Other U.S. ____
Total U.S. 2596
Host Govt. ____
Other Donor(s) ____
Total 2596

8. Purpose Code
Category Code ____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			607		2,596	
Total			607		2,596	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal The goal of this project is to improve the quality of life by making basic health services, particularly those related to MCH, nutrition and family planning available and accessible to the majority of the population of developing nations, at a cost affordable by the assisted nations.

13. Project Purpose(s) ~~The purpose of this~~ project is to expand health services through a new technology for the accelerated training and deployment of mid-level health manpower, and to provide guidance in building the institutional and organizational arrangements necessary for their utilization and continuing support.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: ____

I. Project Summary

MEDEX Technology is a training methodology developed in the United States within the last six years to rapidly train and deploy mid-level health manpower. Training consists of three months of intensive instruction in classroom settings followed by a twelve-month preceptorship under the direction of pre-selected physicians in rural general practice. The conceptual model envisioned a collaborative educational experience involving the potential users of MEDEX, e.g. the physicians preceptors; the educators through the sponsoring universities; and the students themselves in a combined effort to unit existing resources to meet growing needs for health care in a specific geographic area. Although, students and physicians are pre-matched before training begins, and the instruction is generally provided on a one-to-one basis, it has been shown to be feasible for one physician to supervise a number of MEDEX and thus greatly increase his geographic coverage. Under the leadership of the nine U. S. Medical Schools which currently offer training in this system MEDEX programs are now being applied in 36 states of the United States and in Micronesia. It is the design of this project that for a period of approximately four years, the Health Manpower Development Staff (HMDS) at the University of Hawaii School of Medicine (a MEDEX training school) undertake the developmental tasks and planning needed to adapt and install MEDEX Systems into LDC settings. This will include, among other outputs, field visits to LDC governments to explain the system and training technology; the in-depth planning, design and monitoring of up to six implementation projects in six LDCs wishing to embark on MEDEX programs; and the conduct of extensive evaluation studies of those six programs.

II. Financial Requirements and Plans

See attached budget worksheets, cost of outputs analysis, and costs summary sheet.

III. Development of the Project

1. Under the terms of an AID/HEW Resources Support Agreement and thereunder by contract implemented in June 1974, the University of Hawaii School of Medicine through its HMDS staff has to date provided design studies and support for the task of planning, staff recruitment, program implementation and management, and the developmental work for training and evaluating MEDEX type Manpower programs for LDC environments. Although further refinement is anticipated, the basic format and processes to be used in training modules have been designed. The feasibility of this project in terms of the technology to be transferred to the LDCs has been determined.

2. It is anticipated that the PROP for this project will be forwarded for final approval prior to 25 June 1975.

3. A short TDY visit to Washington by the HMDS Staff Director is planned (mid-June, 1975) in order that he may take part in discussions leading to the final review of the PROP.

IV. Issues of a Policy or Programmatic Nature

Up to the present time HMDS staff have had relatively limited opportunities to do a thorough job of assessing LDC interest in MEDEX type programs. Despite this, officials of a number of countries have expressed interest in the system including Iran, Guyana, Ghana, Nigeria,

Liberia, Sudan, Ethiopia and Lesotho. Additionally AID Mission Officers in Afghanistan, Dominican Republis and Haiti have conveyed their interest to the HMDS staff. The conclusion is that there is sufficient in interest to warrant this project at this time, and that LDC interest can be expected to increase as the concepts of the system reach a wider audience.

Budget

PERSONNEL	01 Year Analysis of Cost SALARY	BENEFITS	TOTAL	02 Year	03 Year	04 Year
Staff Director	36,415	3,878	40,293	42,307		
Deputy Staff Director	26,592	6,116	32,708	39,249		
Administrative Assistant	12,012	2,763	14,775	17,729		
Associate Director - Planning	30,000	6,900	36,900	44,280		
Associate Director - Training	25,000	5,750	30,750	36,900		
Preceptorship Operations (TBR)*	30,000	6,900	27,675 2/	44,280		
Educational Specialist	10,656	2,451	13,107	15,728		
Medex	15,360	3,533	18,893	22,671		
Medex (TBR)	15,360	3,532	18,892	22,671		
Training Communication Spec. (TBR)	18,000	4,140	11,070 3/	26,568		
Health Manpower Specialist - I	8,124	1,868	9,992	11,991		
Audiovisual Technician	11,080	2,548	13,628	16,354		
Associate Dirbctor - Evaluation	25,000	5,750	30,750	36,900		
Management/Economist (TBR)	20,000	4,600	12,300 3/	29,520		
Survey & Test Construction Spec. (TBR)	18,000	4,140	22,140	26,568		
Stenographer - II	6,600	1,518	8,118	9,742		
Stenographer - II (TBR)	6,600	1,518	8,118	9,742		
Stenographer - II (TBR)	6,600	1,518	8,118	9,742		
	321,399	69,423	358,227			
20% increase 1/	56;996	13,110	63,586			
Totals:			421,813	462,942 4/	488,402 4/	515,26 4/
Rounded Totals:			421,900	462,950	488,450	515,300

*(TBR) to be Recruited

1 Anticipated 20% salary increase effective 7/1/75 for all project personnel except the Staff Director.
2 For 9 months of service
3 For 6 months of service
4 Totals shown includes salary and benefits and an assumed increase at 5.5%

Budget (Continued)

	PRIOR PROJECT FUNDED FY 1974		01 Year (July 75-June 76)	02 Year (July 76-June 77)	03 Year (July 77-June 78)	04 Year (July 78-June 79)
PERSONNEL						
Salary	167,000		346,600	380,200	401,150	423,200
Benefits	38,410		75,300	82,750	87,300	92,100
CONSULTANTS						
Training, adm./eval. @ $125/day	10,000		25,000	25,000	20,000	15,000
TRAVEL AND PER DIEM						
International:						
18 (Multiple) site visits, plus consultant travel (30 trips @ $1,500)		45,000				
Per diem for 200 days @ $30.00/day		6,000				
Domestic:						
Coordination & visits to potential collaborating universities; Washington, D.C.; and consultant travel (36 trips)		19,800				
Per diem @ $30.00/day	31,340	5,200	76,000	75,000	75,000	75,000
OTHER DIRECT COSTS						
Office Supplies, Books, etc.		7,200				
Office Rental @ $7/sq. ft.		14,000				
Telephone (3 lines)		6,000				
Printing and Reproduction	18,400	6,000	33,200	33,200	33,200	33,200
Office Equipment:						
Executive Desks @ $300.00		1,500				
Executive Chairs @ $150.00		750				
Stenographers Desks @ $200.00		400				
Stenographers Chairs @ $100.00		200				
Files @ $150.00		300				
Electric Typewriters @ $600.00		1,800				
Various	9,150	-	4,950	-	-	-
Audiovisual Equipment			4,500	-	-	-
Contracting & Contingencies	3,700		-	-	-	-
SUB-TOTAL	278,000		565,550	596,150	616,650	638,500
OVERHEAD @ 8%1/	22,000		42,020	44,307	45,757	47,310
TOTAL	300,000		607,570	640,457	662,407	685,810

1/ Calculation excludes the salary and benefits of the Staff Director.

ESTIMATED COSTS OF OUTPUTS

OUTPUT ELEMENTS	YEAR: 01	02	03	04	TOTALS		PERCENTAGE COST
(1) Organization & Development of HMDS Staff	12,700				12,700	12,700	.49
(2) STEM Modules							
a) Format design & process	4,850	2,500			7,350		
b) Construction of modules in draft	127,975	95,300	49,100	13,600	285,975		
c) Test draft modules		26,500	48,450	37,250	112,200		
d) Development of refined modules		15,100	50,250	64,800	130,150	535,675	20.63
(3) Reconnaissance Visits (Includes network & linkage building & maintenance of linkage)	152,875	97,850	60,800	54,950	366,475	366,475	14.11
(4) MEDEX Programs							
a) Country Planning & Design	70,950	66,525	20,550		158,025		
b) MEDEX & Preceptor Training Design	16,750	15,300	11,000		43,050		
c) Consultative Assistance to Training Projects	15,500	34,000	34,000	25,900	109,400		
d) MEDEX Certification		5,475	9,675	6,350	21,500		
e) Follow-up Guidance for Replication Programs			24,300	56,200	80,500	412,475	15.88
(5) Consultative Assistance to LDCs on questions of Health Manpower apart from MEDEX Technology	23,000	34,400	28,200	26,900	112,500	112,500	4.33
(6) MEDEX MODEL, Guidance & Operational Procedures							
a) Health Manpower Selection	9,675	7,900			17,575		
b) General Administration		7,750	7,500	8,650	23,900		
c) Communications Systems, Supervision & Referral		6,500	10,800	13,600	30,900		
d) Continuing Education of MEDEX Graduates		9,850	22,150	23,550	55,550		
e) Field Operations Management & Logistics Support		13,400	10,850	15,200	39,450	167,375	6.45
(7) Evaluation							
a) Design of Protocol	42,175				42,175		
b) Field Test of Evaluation Tools	33,500	66,050			99,550		
c) Collection of Baseline Data	12,950	32,550	93,975	70,900	210,375		
d) Analyses of Data			28,350	69,750	98,100	450,200	17.34
(8) Information Dissemination		26,000	73,500	117,700	217,200	217,200	8.37
SUBTOTALS :	522,900	562,950	583,450	605,300	2,274,600		
OTHER DIRECT COSTS:	42,650	33,200	33,200	33,200	142,250	142,250	5.48
OVERHEAD @ 8% :	42,020	44,307	45,757	47,310	179,394	179,394	6.91
TOTALS :	607,570	640,457	662,407	685,810	2,596,244	2,596,244	99.99%

ESTIMATED COSTS OF OUTPUTS 01 YEAR

OUTPUT ELEMENTS	TOTAL	CORE STAFF MM	CORE STAFF $	CONSULTANTS MD	CONSULTANTS $	TRAVEL & PER DIEM $
(1) Organization & Development of HMDS Staff	12,700	4	8,800			3,900
(2) STEM Modules						
a) Format design & process	4,850	2	4,850			
b) Construction of modules in draft	127,975	77	117,600	35	4,375	6,000
c) Test draft modules						
d) Development of refined modules						
(3) Reconnaissance Visits (Includes network & linkage building & maintenance of linkages)	152,875	34	108,500	75	9,375	35,000
(4) MEDEX Programs						
a) Country Planning & Design	70,950	23	53,700	50	6,250	11,000
b) MEDEX & Preceptor Training Design	16,750	8	15,500	10	1,250	
c) Consultative Assistance to Training Projects	15,500	6	12,400			3,100
d) MEDEX Certification						
e) Follow-up Guidance for Replication Programs						
(5) Consultative Assistance to LDCs on questions of Health Manpower apart from MEDEX Technology	23,000	6	15,000			8,000
(6) MEDEX MODEL, Guidance & Operational Procedures						
a) Health Manpower Selection	9,675	4	8,150	5	625	900
b) General Administration						
c) Communication Systems, Supervision & Referral						
d) Continuing Education of MEDEX Graduates						
e) Field Operations Management & Logistics Support						
(7) Evaluation						
a) Design of Protocol	42,175	14	36,700	15	1,875	3,600
b) Field Test of Evaluation Tools	33,500	11	29,900	10	1,250	2,350
c) Collection of Baseline Data	12,950	5	10,800			2,150
d) Analyses of Data						
(8) Information Dissemination						
SUBTOTALS	522,900	194	421,900	200	25,000	76,000
OTHER DIRECT COSTS	42,650					
OVERHEAD @ 8%	42,020*					
TOTAL FOR YEAR	607,570					

* Calculation excludes the salary & benefits of the Staff Director.

ESTIMATED COSTS OF OUTPUTS 02 YEAR

OUTPUT ELEMENTS	TOTAL	CORE STAFF MM	CORE STAFF $	CONSULTANTS MD	CONSULTANTS $	TRAVEL & PER DIEM $
(1) Organization & Development of HMDS Staff						
(2) STEM Modules						
a) Format design & process	2,500	1	2,500			
b) Construction of modules in draft	95,300	55	89,200	20	2,500	3,600
c) Test draft modules	26,500	12	21,400			5,100
d) Development of refined modules	15,100	8	15,100			
(3) Reconnaissance Visits (Includes network & linkage building & maintenance of linkages)	97,850	20	63,400	50	6,250	28,200
(4) MEDEX Programs						
a) Country Planning & Design	66,525	21	53,200	55	6,875	6,450
b) MEDEX & Preceptor Training Design	15,300	8	12,800	20	2,500	
c) Consultative Assistance to Training Projects	34,000	11	24,000			10,000
d) MEDEX Certification	5,475	2	3,600	15	1,875	
e) Follow-up Guidance for Replication Programs						
(5) Consultative Assistance to LDCs on questions of Health Manpower apart from MEDEX Technology	34,400	7	23,900			10,500
(6) MEDEX MODEL, Guidance & Operational Procedures						
a) Health Manpower Selection	7,900	4	5,800	10	1,250	850
b) General Administration	7,750	4	6,500	10	1,250	
c) Communication Systems, Supervision & Referral	6,500	4	6,500			
d) Continuing Education of MEDEX Graduates	9,850	9	9,850			
e) Field Operations Management & Logistics Support	13,400	8	13,400			
(7) Evaluation						
a) Design of Protocol						
b) Field Test of Evaluation Tools	66,050	23	58,100	10	1,250	6,700
c) Collection of Baseline Data	32,550	11	27,700	10	1,250	3,600
d) Analyses of Data						
(8) Information Dissemination	26,000	8	26,000			
SUBTOTALS	562,950	216	462,950	200	25,000	75,000
OTHER DIRECT COSTS	33,200					
OVERHEAD @ 8%	44,307 *					
TOTAL FOR YEAR	640,457					

* Calculation excludes the salary & benefits of the Staff Director.

ESTIMATED COSTS OF OUTPUTS 03 YEAR

OUTPUT ELEMENTS	TOTAL	CORE STAFF MM	CORE STAFF $	CONSULTANTS MD	CONSULTANTS $	TRAVEL & PER DIEM $
(1) Organization & Development of HMDS Staff						
(2) STEM Modules						
a) Format design & process						
b) Construction of modules in draft	49,100	21	49,100			
c) Test draft modules	48,450	19	44,000	10	1,250	3,200
d) Development of refined modules	50,250	20	46,900	10	1,250	2,100
(3) Reconnaissance Visits (Includes network & linkage building & maintenance of linkages)	60,800	13	41,800	40	5,000	14,000
(4) MEDEX Programs						
a) Country Planning & Design	20,550	4	10,500	30	3,750	6,300
b) MEDEX & Preceptor Training Design	11,000	6	11,000			
c) Consultative Assistance to Training Projects	34,000	14	26,000			8,000
d) MEDEX Certification	9,675	2	3,350	15	1,875	4,450
e) Follow-up Guidance for Replication Programs	24,300	10	18,100			6,200
(5) Consultative Assistance to LDCs on questions of Health Manpower apart from MEDEX Technology	28,200	6	19,700			8,500
(6) MEDEX MODEL, Guidance & Operational Procedures						
a) Health Manpower Selection						
b) General Administration	7,500	8	7,500			
c) Communication Systems, Supervision & Referral	10,800	9	10,800			
d) Continuing Education of MEDEX Graduates	22,150	13	18,800	10	1,250	2,100
e) Field Operations Management & Logistics Support	10,850	7	7,500	10	1,250	2,100
(7) Evaluation						
a) Design of Protocol						
b) Field Test of Evaluation Tools						
c) Collection of Baseline Data	93,975	32	81,600	5	625	11,750
d) Analyses of Data	28,350	8	18,300	30	3,750	6,300
(8) Information Dissemination	73,500	24	73,500			
SUBTOTALS	583,450	216	488,450	160	20,000	75,000
OTHER DIRECT COSTS	33,200					
OVERHEAD @ 8%	45,757*					
TOTAL FOR YEAR	662,407					

* Calculation excludes the salary & benefits of the Staff Director.

ESTIMATED COSTS OF OUTPUTS 04 YEAR

OUTPUT ELEMENTS	TOTAL	CORE STAFF MM	CORE STAFF $	CONSULTANTS MD	CONSULTANTS $	TRAVEL & PER DIEM $
(1) Organization & Development of HMDS Staff						
(2) STEM Modules						
a) Format design & process						
b) Construction of modules in draft	13,600	6	13,600			
c) Test draft modules	7,250	13	31,800	10	1,250	4,200
d) Development of refined modules	64,800	28	64,800			
(3) Reconnaissance Visits (Includes network & linkage building & maintenance of linkages)	54,950	15	43,100	10	1,250	10,600
(4) MEDEX Programs						
a) Country Planning & Design						
b) MEDEX & Preceptor Training Design						
c) Consultative Assistance to Training Projects	25,900	11	20,900			5,000
d) MEDEX Certification	6,350	2	3,300	10	1,250	1,800
e) Follow-up Guidance for Replication Programs	56,200	18	36,700	20	2,500	17,000
(5) Consultative Assistance to LDCs on questions of Health Manpower apart from MEDEX Technology	26,900	6	19,500			7,400
(6) MEDEX MODEL, Guidance & Operational Procedures						
a) Health Manpower Selection						
b) General Administration	8,650	8	8,650			
c) Communication Systems, Supervision & Referral	13,600	11	13,600			
d) Continuing Education of MEDEX Graduates	23,550	12	18,700	10	1,250	3,600
e) Field Operations Management & Logistics Support	15,200	7	10,350	10	1,250	3,600
(7) Evaluation						
a) Design of Protocol						
b) Field Test of Evaluation Tools						
c) Collection of Baseline Data	70,900	22	55,900			15,000
d) Analyses of Data	69,750	25	56,700	50	6,250	6,800
(8) Information Dissemination	117,700	32	117,700			
SUBTOTALS	605,300	216	515,300	120	15,000	75,000
OTHER DIRECT COSTS	33,200					
OVERHEAD @ 8%	47,310*					
TOTAL FOR YEAR	685,810					

* Calculation excludes the salary & benefits of the Staff Director.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ ~~Grantee~~
Worldwide

2. Document #1 -- PID
Status: New ☐ Revision # _____ ☐
Proposed Next Document:
Proposed Date of Submission:

3. Project Number

4. Bureau Code

5. Project Title
A. Voluntary Agency Support for Health Delivery
B Systems (Christian Medical Council)

6. Estimated Initial/Final Obligation
FY _____ FY _____

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = _____)
AID Approp. _____
Other U.S. _____
Total U.S. _____
Host Govt. _____
Other Donor(s) _____
Total _____

8. Purpose Code
Category Code _____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
AID			100		300	
Total			100		300	

11. Other U.S.

Program Type	1st Yr	All Yrs
E.I.G.		
PL 480-Title II		
Total		

12. Project Goal : To improve the quality of life by making basic health services, particularly those related to MCH, nutrition and family planning available and accessible to the majority of the population of developing nations, at a cost affordable by the assisted nations.

13. Project Purpose(s) : ~~Demonstrate a mechanism~~ which ends practices of disorganization, di disinterest, misunderstanding and fragmentation of services by implementing partnership possibilities between church, church-related and other private organizations with Governments allowing the providers of services to do priority matching, modify program goals toward community needs and desires and which are within reach of the economy of the country concerned.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: _____
Title & Date: _____

Date Received in AID/W or for AID/W Documents; date of Distribution: 3-3

Voluntary Agency Support
for Health Delivery Systems
(Christian Medical Council)

I. SUMMARY OF PROBLEM

In most LDCs the people who live in rural areas comprise nearly 80 percent of the total population, and under the best circumstances, less than 37 percent of these rural dwellers have access to any type of health service.

The LDC Governments are faced with the challenge of developing a low-cost health delivery system which adequately meets the health needs of the neglected rural populations and also one that satisfies the expanding demands and needs of those presently covered by the system. Developing and providing effective health services is complicated by the ever increasing numbers of people to be served. There is concern about the extent to which people may continue to look to governments to provide all health services to all people. With this concern has come a growing interest in other approaches that will lead to increased consumer responsibility for family and community health and the development of health practices that promote health and reduce demands for only curative services.

It is believed that churches and church related groups can modify their approaches to the health problems in LDCs and can be mobilized to support unified health programs and can create the desired involved PVOs and individual citizen participation. The private organization sector is a very significant force which has proven its value in the developed countries, particularly in the United States, and which has not yet been integrated nor coordinated into the health systems of developing countries.

CMC is convinced that most diseases affecting people in LDCs are preventable and the high death rates among children and young adults can be greatly reduced. It is also convinced that knowledge on how to prevent diseases and how to cut death rates already exists and there is no further scientific discovery or research method necessary to extend these benefits to the poor rural populations.

The proposal of this project is to engage in building necessary partnership possibilities between religious and other private organizations, which are operating health care programs, together with LDC Governments in national settings in order to solve and prevent health problems.

CMC will provide assistance to LDCs, religious and other voluntary organizations with the development of a more equitable and integrated health care system among the poor rural populations in LDCs. The programs and activities implemented will also provide opportunities for extending health and family life education to the poor majority in order to:

a) maximize the effectiveness of treatment and care;
b) prevent diseases and injuries;
c) prevent recurrance of diseases;
d) prevent progression of diseases and injury; and
e) cause more parenthood responsibility to take place among the target populations.

In order to end present practices of disorganization, disinterest, misunderstanding and fragmentation of services, the CMC aims to bring partnership possibilities between religious and private agencies together with governments so that the various providers of services can do priority matching and modify their own institutional program goals toward these activities which are communal in nature, community-selected and which are within the reach of the economy of the country.

A. Estimated Project Outputs

1. There will be a much stronger coordination/training unit functioning in CMC.

2. There will be an expansion and improvement of joint national and international religious and other church related organizations providing more effective input to health delivery systems.

3. There will be an educational tool developed for measuring the impact or effectiveness of specific IEC techniques in staff training and education of the general public.

4. There will be confirmed commitment of effective consultation services from specialists for strengthening capabilities of PVOs in LDCs.

5. There will be re-alignment of resources to promote complementary services and avoid overlapping.

6. There will be facilities for the exchange of personnel.

7. There will be a mechanism for development of common strategy in joint planning with government health agencies and assistance with development of uniform practices in internal administration and fiscal procedures.

B. Estimated Kinds and Amount of Technical and Physical Resources Required

1. Technical assistance in strengthening PVO leadership training programs through workshops, information/education/-

communication training sessions, publications, etc.

2. A roster of professional and technical consultants produced and provided to voluntary organization sector on continuous basis.

3. Agreement among religious and other voluntary organizations on development and implementation of work partnership type cooperation in order to enhance program priority selection and program plan matching for better health services.

4. CMC has adequate professional and technical staff and will make use of committed consultants.

C. Major Assumptions

1. The LDC Governments agreement to the formation and operation of necessary planning and coordination organization aimed at providing collaborative activities designed to cause an impact on health service.

2. Standardized data collection procedures which will be established and utilized.

3. Appropriate evaluation and management guidelines which will be uniformly applied in each individual country project.

4. A viable, self-supporting voluntary private sector which will be developed in each LDC where project is in operation.

Even without medical intervention, each community has a potential resource within itself to promote better health care. Health is a native endowment each person is presumed to possess until proven ill, rather than a distant promise to which one is entitled. Thus, health and nutritional education and community cohesion can become powerful agents in releasing this potential.

It is assumed that a cultural gap exists which defeats the acquisition of better health care between city-educated health workers and illiterate rural folk, even when both are nationals or belong to the same tribe. A better way to get health to the illiterate rural people, getting them to accept new methods and to change attitudes may be to enlist the help of members of the community itself. CMC proposed to place emphasis on a total health function among the rural poor rather than a narrow dispensering type of primary health care because inadequate health care will prevail unless a "total health" function method is applied.

Development of partnership working relationships among CMC and other PVOs is logical and has great potential. Also continued support of CMC from all religious, other church related organizations and the UN organizations is evident.

D. Discription of Activities in Host Country

Knowledge relative to the medical, educational, communicational and social services must be gained by the target populations served in order for them to know "how" to maintain good health, "how" to determine freely the number and spacing of their children in accordance with their capabilities and needs. LDCs are becoming aware of the fact that good health is part of and dependent upon the whole fabric of social, economic, educational and cultural development of people. They are beginning to understand that the concept of public health is one of optimum service rather than only "basic" service. The aim is not to overlook the simple and fundamental services, the basic, as needed for people. At the same time it implies that there is a need for applying the most favorable and positive approach which a community is able to understand, accept and perform in the solution of its total health problem.

This project will see that programs utilize all relevant and available IEC techniques and resources possible in order to educate and influence the target populations in health and family living matters. The manner of work will be to avoid adding to the difficulties of the average person that is preventing him or her from getting a clear appraisement of the health program situation relative to himself, his family and his community.

The current staff activities, as assigned by the Director of CMC, reflect the skills of the assembled staff in medicine, planning, nursing, publications and the humanities. Each of its staff has experience with management and organization of national health consultations. The CMC now needs to assign one staff member as a training and workshop coordinator. This person would assist in the development of workshops in LDCs and have responsibility for providing follow-up and continuity with institutions and health care programs. He will also be in liaison with an emerging national coordinating agency in LDCs. The training workshop coordinator will assist the national formation by communicating its purposes and aims ad determined by the national consultation to the appropriate levels of national government and also clarify and assist in the securement of funding, from government and donor agencies. This capacity would reflect substantial competence in rural development program planning as well as the ability to organize and articulate the stated and described priorities of the people themselves who elect to be served.

CMC promotes the more effective use of resources for medical work through the establishment of structures for joint planning and action between the churches themselves, whether WCC members or not, and between the churches collectively, other voluntary agencies and the governments.

E. Beneficiaries

CMC undertakes and encourages the study of the nature of the christian ministry of healing and the problems which confront it in a changing world. Its activities embrace six continents for the establishment of relationships with other agencies similarly engaged. It promotes the development of, and channels funds to selected experimental programs of strategic and catalytic significance; particularly in the fields of comprehensive and promotive health and in the training of personnel to conduct these. In the end it is the target populations rural poor, who are the main beneficiaries as well as the health personnel and organizations providing the services.

In order to further its effectiveness as an advisory and consultative agency to Divisions of the World Council of Churches, the National Christian Councils, churches and mission organizations, CMC undertakes the:

a) collection of information on existing health and medical programs and develop channels of information concerning the availability of expert resources in the planning and operation of medical institutions.

b) conduction of surveys on request and offer advice both with regard to specific projects and to strategic needs and relative priorities in particular situations.

c) establishment of liaison relationships with appropriate agencies of the U.N., health departments of governments, and foundations engaged in international health.

All health programs must necessarily involve women, both as service recipients and as participants in program implementation. Also women have important administrative positions and staff functions in CMC organizations and other voluntary agencies working in LDCs. Many of the medical, health and other technical personnel of maternal and child care services are women.

F. Replication Possibilities

1. The spread effect is one of the aims of this activity. TA/H thinks that the contractor has a design to put into wide-spread use the results from the project.

2. Through the national coordinating and planning organization established in LDCs, opportunities are created for governments to eventually integrate facilities and services and to jointly sponsor experimental demonstration projects designed to show how scarce resources might be more effectively deployed to produce better services for total populations. These successful demonstrations may be replicated in area by area, country by country until all people are provided services.

3. By participating in planned workshops and site visits the workers from various countries which share common problems, economic and social status learn about the successful demonstrations and utilize the experience gained. Also villages and communities are known to expand successful activities or experiences laterally to other communities of similar nature and plight. Formal and non-formal means of communication will be utilized to diffuse project benefits.

II. Financial Requirements and Plans

CMC request USAID for a Development grant in the amount of $100,000 per annum for a three-year period, beginning in fiscal year 1975/76, a total of $300,000 for duration of project. AID cost is 100 percent for this development phase of the project. LDCs and other PVOs bear substantial share of cost for in-country services operations. The proposed allocation of this grant would be as follows:

a) One additional full-time staff member together with part-time secretarial assistance and allocated costs	$30,000
b) Travel	6,000
c) Subsidy to increase publication distribution	10,000
d) Engagement of Consultants	22,000
e) Subsidy for national workshops/surveys	17,000
f) Travel grants	15,000
Yearly Total	$100,000

For its over-all operations, CMC receives its financial support from The World Council of Churches and other private donor resources. This PDG requested from AID is to assist the organization in development of its capabilities for strengthening the potentials of the variety of PVOs in LDCs for providing more effective and efficient health services.

III. DEVELOPMENT OF THE PROJECT

A. The project will be developed by:

1) establishing a national coordinating and planning body in selected countries through which the churches, representing the bulk of the private sector, could make more effective use of their collective resources and engage in joint planning with governments and other PVOs for an eventual integration of all facilities and services.

2) reviewing deficiencies in existing health care systems and sponsoring experimental demonstration projects designed to show how scarce resources might become more effectively deployed to produce better health care for total populations.

3) testing the combined agency approach used by private and voluntary organizations in the past. These groups are a very significant force which has proven its value in the developed countries and which has not been integrated into the health system of developing countries.

4) applying to health services in LDCs the already known and existing facts of how to prevent diseases and improve health standards. The problem is not one of deficiency of technology nor lack of information about diseases to be attacked, but one of economic and political priorities, lack or coordinated efforts, and social and cultural attitudes of persons who are afflicted. No feasibility study is necessary. The project is feasible. Criteria for selection of countries and for selection of villages within countries are available with CMC. The PRP is scheduled for submission in July 1975 and the PP will be submitted in early FY 76. TA/H will assist with these.

B. Proposed timeframe for project development and implementation is a three-year period.

C. AID Resources required for developing the project are as follows:

1. Development Grant in the amount of $100,000 per annum for a three-year period beginning in the fiscal year 1975/76. (Total of $300,000)

2. Monitoring Services

3. Evaluation Services

4. Staff assistance in development of PROP and other AID documents.

5. AID Mission liaison is desired in countries where ever activity is in operation.

IV. ISSUES OF A POLICY OR PROGRAMMATIC NATURE

The proposal stresses the importance of improving nutrition and sanitation situations at the same time other services are provided and states that unless this is done the health services provided will be of little or no good. Then the proposal does not indicate what action will be implemented to improve nutrition nor sanitation conditions in order to make the proposed actions more valid.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
Worldwide

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
November 1, 1975

3. Project Number

4. Bureau Code
TAB

5. Project Title
A. Center for Health Training Research, Phase III
B

6. Estimated Initial/Final Obligation
FY 76 FY 80

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = 1,245)
AID Approp. ____
Other U.S. ____
Total U.S. ____
Host Govt. ____
Other Donor(s) ____
Total ____

8. Purpose Code
Category Code ____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			247		1,245	
Total			247		1,245	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal: To improve the quality of the life by making basic health services, particularly those related to MCH, nutrition and family planning available and accessible to the majority of the population of developing nations, at a cost affordable by the assisted nations.

13. Project Purpose(s): To improve the teaching and training of health professional and paramedical personnel in LDCs.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: 3-2

I. Summary of the Problem and the Proposed Response

A. THE PROBLEM

Health Professions Training Programs in the Lesser Developed Countries are characterized by deficiencies in these general areas:

1. Courses are given in response to immediate felt needs rather than planned and delivered in accordance with long range health manpower development efforts.

2. Job specifications for health professionals are adapted from pre-existing models generally developed in the U.S. or in Western Europe rather than derived from an analysis of the health manpower needs of the particular region.

3. Courses are generally not planned according to a systematic approach involving derivation of course objectives from job specifications and task analysis. Instructors are not trained in course design or in instructional methods and evaluation.

4. Evaluation of courses is limited to the evaluation of student performance on paper and pencil tests for the most part.

5. Instruction is usually delivered via lectures and demonstrations. Instructors generally do not utilize modern instructional methods accessible to them in terms of cost and manpower.

6. Few courses and course materials exist whose objective is to improve health professions teaching in the L.D.C.'s.

7. Health professionals in the L.D.C.'s are not aware of existing course materials which may be appropriate to their own instructional needs.

B. PROPOSED RESPONSE

The newly constituted Harvard University Center for Educational Development in Health in participation with the faculties of Public Health, Medicine, Education and Dental Health proposes to work towards improved health professions teaching programs in the L.D.C.'s by:

1. Assisting health professionals in the L.D.C.'s in formulating long range health manpower training curricula.

2. Assisting these health professionals in specifying job descriptions suitable to health manpower needs in their particular country.

3. Assisting health professional teachers to develop their courses according to a systematic procedure involving

   - derivation of course objectives from job specification and task analysis

- specification of an evaluation system derived from course objectives.

- selection of instructional activities appropriate to course objectives.

4. Assisting health professionals in preparing instruments for evaluating courses and curricula.

5. Acquainting Instructors from the L.D.C.'s with modern instructional methods suitable to their needs and to their constraints.

6. Developing courses and course materials for the training of health professions teachers which can be utilized by faculty from L.D.C.'s for the training of their countrymen.

7. Providing bibliographic support for curriculum development projects by making available annotated listings of relevant instructional materials and course syllabus.

The Center for Educational Development in Health proposes to implement these objectives by:

- Building long range relationships/linkages with international teacher training programs in the health field.

- Providing consultation to institutions with teacher training problems.

- Teaching courses, seminars and workshops to international students at Harvard University and abroad.

- Conducting research projects to provide better instructional methods and materials for the developing areas.

- Publishing texts, instructional materials, articles and monographs designed to be of help to health professional teachers in the developing areas.

D. PROJECT OUTPUTS

The project outputs are summarized on the project milestone chart (see below p. 28) and the project outputs chart (see p.33)

1. Existing Linkages

During the period of the field trial of the self-instructional materials on course design in six developing areas July 1974 to the present, staff and fellows of the Center have been evolving plans for long range health manpower development relationships.

a. Colombia: Drs. Dieter Koch-Weser and Dodge Fernald provided resource support to the Colombia field trial. Because of the success of the Harvard workshop on Course Design, the Bogota field directors, Dr. Jaime Arias Facultad de Medicina, Ofic Educacion Medica, Universidad Javeriana, Bogota and Dr. Francisco Yepes, Head, Bio-Medical Investigations Unit, Asociacion Colombiana de Facultades de Medicina with support from the local A.I.D. mission, want to present several workshops on course design at the Pontificia Universidad of Javeriana, Bogota, Universidad of Bucaramanga and Universidad of Cali over a 2-3 year period (see Appendix A, letter by Dr. Escallon). They also plan to adapt the text Systematic Course Design to Latin American health professional populations. This project they expect will assure that modern course design techniques will be utilized in Colombia. A.I.D. Bogota has expressed an interest in this activity.

The board of directors of the Pan American Federation of Medical Schools (PAFAMS or FEPAFEM) plans to adopt the Harvard method after the basic text has been adapted to Latin American health professional populations.

b. Honduras: Dr. Jorge Haddad, Vice Rector, Health Sciences, University of Honduras, Field Director at Tegucigalpa would like to give additional courses to health professionals in his area with the support of Harvard Center staff. Dr. Dodge Fernald provided resource support to this field test site.

c. Vietnam: Dr. Huynh Van Huon, Minister of Health, Dr. Van Van Cua, Director National Institute of Public Health and Dr. Nguyen Xuan Trinh, Director of Training, Ministry of Health have indicated their interest in establishing a long term relationship with Harvard. Such a relationship would include consultation on curriculum design projects, and help in planning a National Health Teacher Training Center for Vietnam. Dr. Tu, Dean, Saigon Dental School expressed his interest in asking Harvard to help revise the curriculum in dentistry. (See Appendix B, letter by Dr. Huon.) Dr. Lori Vanderschmidt provided resource support to the Vietnam project both under the auspices of A.I.D. and during October-November 1974 under the auspices of W.H.O.

d. Malaysia: Dr. Eddy Lo, Director of the Epidemiology Division and Malaria Evaluation Training Center, Institute of Public Health, Kuala Lumpur, conducted a workshop on systematic course design March 17-April 4, 1975. Six health professional schools in Malaysia were represented as well as the University of the Philippines, School of Medicine. Dr. Patricia McArdle provided resource support to this field trial.

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e. Nepal: Dr. Moin Shah, Dean Institute of Medicine, Ministry of Education, has asked Harvard Center staff to conduct workshops on Course Design and on Teacher Training at Kathmandu June, July 1975. Such workshops for Institute of Medicine faculty will initiate curriculum development projects for a variety of health professionals including health assistants, laboratory technicians, radiographers, pharmacists and nurses. Negotiations are also underway with the Ministry of Health, (Dr. Rudra Man Shrestha), to provide training in educational theory and methods at Harvard to 2-3 Nepalese health professionals. Such training will enable these individuals to assume a leadership role in their country's health manpower development. Dr. Vanderschmidt has conducted these negotiations. Dr. Koch-Weser has worked in Nepal on health manpower studies during the period 1968-1972.

f. Pakistan: Dr. Siraj al Hag, Chief Health Section, Planning Commission (federal) Islamabad indicated his interest in enlisting Harvard help in training trainers for a proposed two year curriculum for three categories of health workers including a medical care worker, a communicable disease paramedic and a combination midwife/MCH/family planning worker. Dr. Siraj is interested in having Harvard conduct a workshop to train trainers in Islamabad July 1975. Dr. Vanderschmidt is conducting these negotiations.

g. Cameroun: Dr. Lazare Kaptue, Professeur Agrege d'Immunologie Hematologie et Maladies du Sang Centre Universitaire des Sciences de la Sante, field director in Yaounde has been asked to conduct a course design workshop at L'Ecole Nationale de Sante et d'Action Sociale Libreville, Gabon. He is considering this proposal. Dr. Fernald provided resource support to this field trial.

h. Lebanon: The Lebanon workshop in systematic course design is scheduled for July 1975. Dr. Nabil Kronfol, Assistant Professor Pediatrics - Public Health, American University of Beirut, field director, Beirut, has been asked to conduct workshops based on the Harvard model in Sudan and Saudi, Arabia. Dr. Kronfol has received requests from the Free University of Iran to arrange for consultation from Harvard on self instruction for primary care paramedics. He has also been invited to aid in health manpower training in Sudan, Egypt and Jordan.

i. Israel: The Center is currently conducting a three year collaborative project in Health Manpower Development at the Health Sciences Center of the Ben Gurion University of the Negev in Beersheva. The project is funded by Health Resources Administration, Division of Manpower Intelligence. The Center is actively involved in developing a complete curriculum for the medical school which has as a primary goal the training of primary care physicians. The model for systematic curriculum design developed by the Center for Educational Development in Health serves as the basis for formulating a six year medical curriculum at the University of the Negev. The first class of students was admitted in November 1974. The Harvard Center for Educational Development in Health is

participating in the development of courses and their evaluation. It is anticipated that experience gained in the relatively underdeveloped Negev area of Israel will be relevant to the problem which face many of the lesser developed countries. Dr. Segall is directing the curriculum development effort at Beersheva.

2. Potential Linkages

a. Center staff will explore other linkages including a possible relationship with the University of Jordan. Dr. A. Majali, Dean, has invited Center staff to visit in order to discuss a possible relationship.

The current series of teacher training workshops as described above is based on the appointment of graduates of the Center for Educational Development in Health as field directors of the project in their respective countries. The potential exists for similar activities in collaboration with the Center for Educational Development in Health to be conducted by graduates of the Program in other developing countries. A partial list of these countries and the graduates is shown below.

3. Teaching and Consultation

Presently the Center for Educational Development in Health offers seminars and workshops on course design and on educational policy. These are described further on p. 38 below.

Teaching programs at the Center will include the following:

- Short term intensive courses on curriculum design, evaluation and educational methods for health professional teachers from the L.D.C.'s with a limited amount of time to spend in the United States. For example a regular workshop for overseas teacher trainers is planned.

- Individual programs tailored to meet specific needs including the preparation of educational personnel for overseas assignments.

- Courses for health professionals for the L.D.C.'s who are enrolled in programs of study concerned with their respective substantive fields.

- Organization of degree programs for selected students from L.D.C.'s combining the resources of the Harvard School of Public Health, the Harvard Medical School, the Harvard Dental School, and the Harvard Graduate School of Education.

The following additional courses will be developed and taught both at Harvard and abroad during the project period.

Training of Paramedical Workers for the L.D.C.'s.

This course will include the history and present status of paramedical training programs in the L.D.C.'s. Broad policy issues and trends will be evaluated. Students will study presently existing syllabi, educational materials and research reports on paramedic training programs suitable for the L.D.C.'s.

Curriculum Development

A course on the development of total curricula is planned. This course will complement the present seminars on course design. Students will have an opportunity to evaluate curricula in their area of interest and to plan curriculum using the methodology presented.

Evaluation and Testing

A seminar on methods for designing, implementing and analyzing tests and testing programs using examples from the L.D.C.'s. Participants are asked to plan an evaluation, to design a test instrument, to administer this and to analyze test results.

Educational Methods

A seminar on educational methods suitable for teaching in the L.D.C.'s. Educational methods calling for maximal student participation are demonstrated. Because of shortages of equipment and supplies in the L.D.C.'s, simple, inexpensive techniques for preparing instructional materials will be stressed. Such methods as role playing, the programmed lecture, the case method, production of self instructional modules may be included in this course.

Student Selection and Recruitment

This course will present the current research and methodology regarding student selection and recruitment for the health professions. Limitations in current methods will be discussed and alternatives offered.

Consultation by Harvard Center staff will take one or more of the following forms:

- Follow-up of teacher training workshops in the L.D.C.'s. Here Center staff will provide on site support for individual instructors who have participated in teacher training workshops utilizing the Harvard method.

- Performance analysis. Center staff will assist curriculum planners in formulating, conducting and evaluating a performance analysis of health professionals for purposes of developing objectives for instruction.

- Editorial support of ongoing curriculum development projects. As L.D.C.'s prepare course designs and instructional materials, Harvard staff will provide periodic editorial review as is requested.

- Evaluation of education programs for training health professionals. Harvard Center staff will assist L.D.C.'s in evaluating ongoing education programs by participating in the design, administration and analysis of test instruments.

- Bibliographic support. The Center librarian will conduct literature searches to iden[illegible]v syllabi, instructional materials and research report[illegible] health manpower curricula applicable to the L.D.C.'s.

- Consultation to A.I.D. mis[illegible]s and A.I.D. Washington will be given in the broad area o[illegible] curriculum planning, educational methods and evaluation.

4. Research and Development/Publication

MAJOR PUBLICATIONS

Simplified Text and Translations of Systematic Course Design

The Nepal workshops on course design as well as the present field trial for the text Systematic Course Design will address the question; How should the present text be simplified to serve individuals with lesser educational backgrounds, poorer understanding of English and less sophisticated 'need to know'?

On the basis of this study a simplified text on systematic course design which currently exists in English, Spanish, French and Vietnamese will be developed. It will use examples drawn from the training programs for paramedical workers for the L.D.C.'s.

Instructor's Manual Systematic Course Design

During the field trial it has become evident that an instructor's manual for Systematic Course Design is needed including: objectives for each phase, evaluation instruments, syllabi and session plans. The manual will also include representative exercises as well as instructions for modifying these and developing others appropriate to the instructors setting and student population.

Syllabus and Course Materials. Training of Paramedical Workers for the L.D.C.'s.

This book will include the course materials for the seminar described in p. 39 below. This publication will include: objectives for the course, readings, annotated bibliographies of suitable instructional materials, as well as syllabi and session plans.

Self Instructional Modules on Educational Methods and Evaluation

These modules will accompany the texts on Systematic Course Design. Their purpose is to demonstrate teaching methods which maybe utilized to advantage in health professions teaching program in the L.D.C.'s. Each module will include objectives teaching materials utilizing print and non print formats and an evaluation. It is expected to include modules on such topics as instructional simulation, the programmed lecture, case method and the construction of performance tests.

Curriculum Development Text

This text, the Companion to Systematic Course Design will detail a method for planning total curricula. Utilizing successive approximation techniques, the curriculum planner works from broad policy concerns to specific course designs.

Syllabus and Course Materials on Student Selection and Recruitment

The variables involved in student selection and recruitment are analyzed the most reliable current techniques and their limitations are described and documented. The text will consider skill, knowledge and attitudinal implications.

Monograph on Educational Technical Assistance

Towards the conclusion of the project staff members will discuss and summarize their general and specific experience in delivering educational technical assistance to health professionals from the L.D.C.'s. Guidelines will be derived to help others undertaking such an effort.

Semi Annual Reports

These reports will summarize the teaching, research and service components of the program. Financial reports will be submitted as well as milestone charts. The reports will detail progress and will describe specific plans for the next project period.

RESEARCH REPORTS

Field Tests

The courses and course materials which are designed during the project period will be tested out at Harvard and in the L.D.C.'s before course materials are published. Field tests will provide feedback for project personnel to revise courses and course materials. Field test reports will be prepared on: the Instructor's Guide: Systematic Course Design and on the courses and course materials for Paramedical Training Programs, Curriculum Design, Evaluation and Testing, Educational Methods and Evaluation and Student Recruitment.

Finally, the performance analysis in the simplified text on Systematic Course Design will be published.

E. TECHNICAL AND PHYSICAL RESOURCES REQUIRED

1. Technical Effort.

It is estimated that the project will require the following technical personnel described by man months of effort:

Man months effort Harvard-U.S.A.I.D. Grant Application

Year	01	02	03	04	05
Instructor	18	18	18	15	18
Educational Technologist	15	17	10	12	5
Evaluation Specialist	-	2	8	7	4
Librarian	6	6	3	3	3
Total Man months per year	39	43	39	37	30

Approximately 4 man years of technical effort is required in each of the project years.

2. Management.

The project requires a management team consisting of two project co-directors (30% each), one project technical director (50%) and one project administrator (50%).

3. Supporting Staff.

It is estimated that two secretaries will be needed for the project.

4. Physical Resources Required.

Duplication and printing services are required. These are described in the Cost Proposal (see Section II, Financial Requirements and Plans below). Routine office supplies are also required.

F. MAJOR ASSUMPTIONS

1. Rationale for Projected Activities: Assumptions and Description of the Target Population

The target population for the Harvard Center's program for the L.D.C.'s will include health professional teachers including physicians, dentists, nurses, midwives, pharmacists and technicians who have a need to plan courses and total curricula.

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development is based on the following considerations.

a. The effectiveness of training programs for health personnel in the lesser developed countries can be increased significantly through the application of educational technology. While this is true insofar as the education of physicians is concerned it is of particular importance in the training of new categories of health manpower such as auxiliary health workers. Systematic curriculum design, use of innovative teaching methods and appropriate application of evaluation procedures can do much to assure optimal utilization of the severely limited resources generally available for health manpower training programs in the developing parts of the world. In order to succeed, however, the technology must be modified and adapted to the specific needs in each country.

b. The newly established Center for Educational Development in Health at Harvard University has the capabilities to respond to the needs of the lesser developed countries by virtue of:

1) the extensive experience which has been acquired by its predecessor (Teacher Preparation Program) in preparing educators for the health professions in developing countries. This experience, which is described in part in other sections of this document, has led to the acquisition of competencies in teacher training which have been applied both in the United States and abroad.

2) the ability of the Center to draw upon the resources of its participating faculties at Harvard University (Medicine, Public Health, Education, Dental Medicine). This opens new possibilities for collaborative activities which were not previously available to the Teacher Preparation Program.

3) a wide network of contact with institutions and agencies responsible for health manpower training in the lesser developed countries. Some of these have been described in the present document. New opportunities for linkages can be expected to arise from the Center's current activities and projected relationship with such agencies as the World Health Organization and the Pan American Health Organization.

c. The basic policy of the Center is to assist individuals and institutions in the lesser developed countries to develop the capacity to function autonomously. This implies that the Center will conduct health manpower development projects in which responsibility for program implementation is progressively assumed by the host institution or agency. The process will generally involve three phases.

- Phase 1. Harvard Center staff trains nationals from the lesser developed countries as curriculum designers or teacher trainers at Harvard, locally or both.

- Phase 2. Nationals so trained conduct teacher training courses in their own countries with resource support and the assistance of staff from the Harvard Center.

- Phase 3. Support from the Harvard Center decreases as experience and capabilities for independent planning and implementation of teacher training activities are acquired by the host institution.

d. Experience gained in one area of the world may suggest solutions for similar health manpower training problems encountered in other areas. The Center will therefore maintain channels of communication whereby information concerning its activities in the various countries can be widely disseminated.

G. MULTIPLIER EFFECT

1. Method Used.

The three phase effort described under 1c. p.12 above should assume that the project achieves the greatest multiplier effect.

2. Publications.

This process is aided by:

- development of self instructional course materials
- publication of field test reports
- development of texts for the L.D.C.'s

3. Relationship with W.H.O.

In February of this year Dr. Ascher Segall met in Geneva with Dr. John Lambo, Deputy Director General of the World Health Organization. Dr. Lambo raised the question of possible collaboration between the Center and W.H.O. in health manpower development in the developing countries. He expressed particular interest in expanding the scope of the teacher training workshops currently being conducted by the Center under the auspices of A.I.D. and felt that a joint effort might be made to extend the workshops to countries which are not currently included in the program. Dr. Lambo suggested that a delegation from the Center meet with him within the next few months to explore in further detail avenues of possible collaboration.

II. Financial Requirements and Plans

A. BUDGET

A.I.D. Budget Year 01

Personnel*		
a. Co Director Ascher J. Segall, M.D.	30%	8,580
b. Co Director Dieter Koch-Weser, M.D.	30%	9,000
c. Technical Director Hannelore Vanderschmidt, Ph.D.	50%	10,000
d. Instructor Lloyd Dodge Fernald, Ph.D.	50%	9,180
e. Instructor Patricia McArdle, Ph.D.	50%	9,180
f. Instructor James Vaughan, Jr., Ph.D.	50%	8,650
g. Educational Technologist Donald Bullock, Ph.D.	50%	13,500
h. Educational Technologist Ruanne Burglass	75%	13,770
i. Evaluation Specialist	0	
j. Librarian	50%	5,000
k. Secretary Geri Duffy	100%	9,800
		$96,660
Fringe Benefits		
14.5% of a, c, d, e, f, g, h, i, j, k, l		12,711
15% of b		1,350
		$14,061
Consultants		
Administrative Consultant Ramona Arnett		8,000
Regional Consultants		12,000
		$20,000

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Year 01 (continued)

Services Purchased	
Reproduction of materials and printing	5,000
Telephone and cables	1,000
Books, Journals and Supplies	3,000
	$9,000
Domestic and International Travel	$32,000
Total Direct Costs	$171,721
Indirect Costs at 44%	$ 75,557
TOTAL	$247,278

* Salaries are increased 8% per year.

A.I.D. Budget Year 02

Personnel

a. Co Director Ascher J. Segall, M.D.	30%	9,266
b. Co Director Dieter Koch-Weser, M.D.	30%	9,720
c. Technical Director Hannelore Vanderschmidt, Ph.D.	50%	10,800
d. Instructor Lloyd Dodge Fernald, Ph.D.	50%	9,915
e. Instructor Patricia McArdle, Ph.D.	40%	7,932
f. Instructor James Vaughan, Jr., Ph.D.	60%	11,208
g. Educational Technologist Donald Bullock, Ph.D.	40%	11,664
h. Educational Technologist Ruanne Burglass	100%	19,830
i. Evaluation Specialist	15%	2,700
j. Librarian	50%	5,400
k. Secretary Geri Duffy	100%	10,580
l. Secretary	50%	4,860
		$113,515

Fringe Benefits

14.5% of a, c, d, e, f, g, h, i, j, k, l	15,050
15% of b	1,458
	$16,508

Consultants

Administrative Consultant Ramona Arnett	4,000
Regional Consultants	3,000
	$7,000

Year 02 (continued)

Services Purchased	
Reproduction of materials and printing	2,000
Telephone and cables	1,000
Books, Journals and Supplies	1,500
	$4,500
Domestic and International Travel	$32,000
Total Direct Costs	$173,523
Indirect Costs at 44%	$76,350
TOTAL	$249,873

A.I.D. Budget Year 03

Personnel

a. Co Director Ascher J. Segall, M.D.	30%	10,000
b. Co Director Dieter Koch-Weser, M.D.	30%	10,500
c. Technical Director Hannelore Vanderschmidt, Ph.D.	50%	11,700
d. Instructor Lloyd Dodge Fernald, Ph.D.	50%	10,700
e. Instructor Patricia McArdle, Ph.D.	40%	8,560
f. Instructor James Vaughan, Jr., Ph.D.	60%	12,120
g. Educational Technologist Donald Bullock, Ph.D.	10%	3,150
h. Educational Technologist Ruanne Burglass	75%	16,050
i. Evaluation Specialist	65%	12,610
j. Librarian	25%	2,916
k. Secretary Geri Duffy	100%	11,425
l. Secretary	50%	5,250
		$114,981

Fringe Benefits

14.5% of a, c, d, e, f, g, h, i, j, k, l	15,150
15% of b	1,575
	$16,725

Consultants

Administrative Consultant Ramona Arnett	1,750
Regional Consultants	1,750
	$3,500

Year 03 (continued)

Services Purchased	
Reproduction of materials and printing	5,000
Telephone and cables	1,000
Books, Journals and Supplies	1,000
	$7,000
Domestic and International Travel	$30,000
Total Direct Costs	$172,206
Indirect Costs at 44%	$ 75,771
TOTAL	$247,977

A.I.D. Budget Year 04

Personnel		
a. Co Director Ascher J. Segall, M.D.	30%	10,800
b. Co Director Dieter Koch-Weser, M.D.	30%	12,600
c. Technical Director Hannelore Vanderschmidt, Ph.D.	50%	12,600
d. Instructor Lloyd Dodge Fernald, Ph.D.	40%	9,240
e. Instructor Patricia McArdle, Ph.D.	40%	9,240
f. Instructor James Vaughan, Jr., Ph.D.	45%	9,810
g. Educational Technologist Donald Bullock, Ph.D.	10%	3,150
h. Educational Technologist Ruanne Burglass	90%	20,790
i. Evaluation Specialist	60%	12,600
j. Librarian	25%	3,150
k. Secretary Geri Duffy	50%	6,200
l. Secretary	50%	5,650
		$115,830
Fringe Benefits		
14.5% of a, c, d, e, f, g, h, i, j, k, l		14,968
15% of b		1,890
		$16,858
Consultants		
Administrative Consultant Ramona Arnett		3,200
Regional Consultants		3,200

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Year 04 (continued)

Services Purchased	
Reproduction of materials and printing	2,000
Telephone and cables	1,000
Books, Journals and Supplies	1,500
	$4,500
Domestic and International Travel	$30,000
Total Direct Costs	$173,588
Indirect Costs at 44%	$ 76,379
TOTAL	$249,967

A.I.D. Budget Year 05

Personnel

a. Co Director Ascher J. Segall, M.D.	30%	11,700
b. Co Director Dieter Koch-Weser, M.D.	30%	13,600
c. Technical Director Hannelore Vanderschmidt, Ph.D.	50%	13,600
d. Instructor Lloyd Dodge Fernald, Ph.D.	50%	12,450
e. Instructor Patricia McArdle, Ph.D.	40%	9,960
f. Instructor James Vaughan, Jr., Ph.D.	60%	14,160
g. Educational Technologist Donald Bullock, Ph.D.	10%	3,348
h. Educational Technologist Ruanne Burglass	30%	6,810
i. Evaluation Specialist	33%	7,491
j. Librarian	25%	3,400
k. Secretary Geri Duffy	100%	13,300
l. Secretary	50%	6,100
		$115,919

Fringe Benefits

14.5% of a, c, d, e, f, g, h, i, j, k, l	14,836
15% of b	2,040
	$16,876

Consultants

Administrative Consultant Ramona Arnett	2,150
Regional Consultants	2,150
	$4,300

Year 05 (continued)

Services Purchased	
Reproduction of materials and printing	5,000
Telephone and cables	1,000
Books, Journals and Supplies	500
	$6,500
Domestic and International Travel	$30,000
Total Direct Costs	$173,595
Indirect Costs at 44%	76,382
TOTAL	$249,977

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 580-971

Project Title DEIDS

Contractor a) APHA

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Establish and evaluate four LCHDS demonstration areas worldwide which will provide receptive accessability in 2/3 of the target group (women child-bearing age & children under five).	1. One demonstration ongoing with evaluation plan nearing approval. Additional project approved. (Agency, International interest in principle LCHDS stimulated).
2. Disseminate project experience by conferences and other means.	2. Conference held in Thailand. Attendee sponsored to international conferences. State-of-the-Art underway.
3. Training of National Leadership for health, population and nutrition planning in demonstration areas.	3. Ongoing in Thailand.
4. Provide technical assistance to Regions & missions related to LCHDS.	4. 16 countries in all regional bureaus have received TA in assessment, design or evaluation.

II. Project on Schedule; Life-of-Project Budget Accurate?

Only two of four proposed demonstrations approved. Evaluation guidelines not complete. Budget inaccurate because of number of demonstration projects differing from planned.

III. Significant Change(s) in Project Proposed?

A) Change demonstration projects to be implemented from four to two.
B) Expand technical assistance role to regional bureaus & mission, as well as in establishing LCHDS network role.
C) Expand evaluation role by piggybacking on other health projects.

IV. Role of TA Technical Office; Mondays required

Project management, documentation
Annual mandays required - 624

Evans	3.5 man days/week
Britanak	3
Shutt	2.5
Florio	2
Hooker, Pease, Others	2
13 x 48 wks. = 624 man days/year	

Attachment: PAR dated To be done in September

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 931-11-580-971

Project Title DEIDS (Thailand sub-project)

Contractor a) APHA

b) Sub-contractor, Univ. Hawaii, School of Public Health

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Operational system in Lampang Prov. which delivers minimal family planning, child nutrition and basic health services to women at reproductive age & children under 6 at a cost within Thai capability. 2. Dissemination of relevant experience in Thailand and elsewhere. 3. Training of public and private leaders from all Thailand provinces in the replicable elements of the system.	1. US/Thai staff recruited; project workshop held, formulated plans for implementation; initiation of: training, integration hosp. P.H. personnel & activities; health committees, health education; village child nutrition centers; commodities for service ordered; eval. plan partially devised, elements being implemented. Efforts directed toward decision making process regarding LCHDS particularly health needs & resources in project area. 2. Project visited by Thai & U.S.officials. 3. Premature.

II. Project on Schedule; Life-of-Project Budget Accurate?

Preliminary review by USAID Mission Director, highly favorable, quarterly reports indicate project on schedule. Life of project budget dependent on scope of evaluation component now under discussion.

III. Significant Change(s) in Project Proposed?

Anticipate enlargement of evaluation to include impact data and data required to measure political perception for replication.

IV. Role of TA Technical Office; Mondays required

Contract monitoring, technical assistance as required, approximately 50 man days per year.

Attachment: PAR dated 12/75

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project #931-11-580-971

Project Title DEIDS/Ecuador sub-project

Contractor a) APHA

b) _____

I. Implementation Progress

PROP signed September 12, 1975. PRO-AG between USAID/Quito and G.O.E. being negotiated.

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Baseline data 2. Training methods & materials 3. Training 4. Establishment of 720 C.H Posts 5. Integrated Health Services 6. Reorganization of PROV H. Office 7. Cost Analyses System 8. Evaluation 9. Joint Project Reviews	This project has been approved by the Deputy Administrator, and negotiations for implementation are ongoing. All the outputs listed contribute to the successful completion of a demonstration project of an affordable health delivery system for the rural majorities.

II. Project on Schedule; Life-of-Project Budget Accurate?

Project has not yet been implemented

III. Significant Change(s) in Project Proposed?

No significant changes

IV. Role of TA Technical Office; Mondays required 75 man days/year

To monitor contractor performance
To review contractor reports
To participate in joint project reviews with contractor, subcontractor, USAID, GOE, and others as occasions demands.

Attachment: PAR dated Due one year after project initiation.

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

KPA #11

Project # 590-211E

Project Title Health Facilities Administration

Contractor a) American Hospital Association, AID/csd - 2598

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
Evaluations of existing health facilities and equipment, management and training procedures. Advice on training programs for administrators. Information center for AID clients on hospital and facility construction and equipment and design of facility complexes to deliver health care.	During this year the contractor provided responses to over 200 requests for information about consultants, training, construction, and equipment. Design of health facilities in Laos was completed and the AHA design accepted by WHO for broader application in South Asia. Provided health manpower for hospital administration program in Vietnam. The contractor continues to provide support for a program to provide used and rehabilitated hospital equipment to hospitals in South America.

II. Project on Schedule; Life-of-Project Budget Accurate?

The project as now approved has been completed. We have requests from Regional Bureaus that it will be continued and anticipate that the level will be about the same.

III. Significant Change(s) in Project Proposed?

No significant change anticipated.

IV. Role of TA Technical Office; Mandays required

30 Man days required.

Attachment: PAR dated 6/20/75

PROJECT [illegible] (PAR)

1. PROJECT NO.	2. PAR PERIOD	3. COUNTRY	4. PAR SERIAL NO.
930-11-520-11	May 1974 TO May 1975	Worldwide	

5. PROJECT TITLE

6. PROJECT DURATION: Began FY Indefinite Ends FY	7. DATE LATEST PROP	8. DATE LATEST PIP	9. DATE PRIOR PAR
			3/19/73

11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)

America Hospital Association	

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X)			B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
[illegible]	AID/W	POST		
	X		Survey Bureaus for need to continue AHA services.	
	X		Review report of AHA due in July 1975 for full activity report for year.	

D. [illegible] | E. DATE [illegible]

PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE	MISSION DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE

Purpose:

To provide a resource for evaluation analysis and planning for administration and strengthening (design & equip.) of health services (both facility & non-facility based) as basis for expansion of delivery systems for preventive and medical care to large majority of population currently having limited or no access to minimal essential services.

Discussion:

During this reporting period the contractor provided services in design, equipping and management of health facilities in Laos. The design provided for Laos has been adopted by WHO for use in other locations in S.E. Asia.

The contractor continued to provide, through a Task Order, a health administration advisor to USAID/Vietnam for the development of health management training.

A survey of hospital engineering and maintenance practices in the public hospitals of the Republic of Honduras was conducted during the reporting period. From this survey a phased program of action has been recommended which includes seminars and training workshops for technicians, and the establishment of a preventive maintenance system.

The AHA receives about 100 written contacts from LDCs annually, approximately one half of these from Latin America.

The contractor serves as a member of the Health Services Advisory Committee of the Pan American Development Foundation. During the first half of FY 1975 the Foundation had received $507,000 of new and used hospital equipment, pharmaceutical and dental supplies that has been shipped to Latin American institutions.

General Conclusions:

The Basic Ordering Agreement and previous contracts have been a continuing arrangement between AID and AHA for more than two decades. These arrangements have been beneficial to AID and the less developed world. The emphasis of Agency programs on hospital construction and design has decreased so that the need for continuation of an on-going contractual arrangement requires careful review. The current program requires a revised PP before FY 1976 funding is made available. The project manager should assess the need for continuing this as a project activity. If an Agency porition is reached that the project will not be funded beyond these funds currently available, that decision should be transmitted to AHA by August 1, 1975. If the project is continued, a revised PP should be submitted by November 1, 1975.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 540-975

Project Title Teaching Community Medicine & Family Planning in Public Health

Contractor a) Harvard University

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Self instructional materials developed. 2. Evaluation of effectiveness of improved teaching methodology. 3. Improved services for family planning, nutrition and health occurring.	1. Field test edition of self instructional materials completed and printed. 2. Evaluation plan for field studies formulated. 3. Workshop for AID field personnel held and evaluated. 4. Saigon, Kuala Lumpur and Bogota workshop held and evaluated. 5. Instructional materials translated into French and Spanish.

II. Project on Schedule; Life-of-Project Budget Accurate?

Project on schedule. Life of project budget accurate except for new countries (ex. Nepal) that wish to come into program.

III. Significant Change(s) in Project Proposed?

1. Simplification of self instructional materials necessitated because less sophisticated requirements in least developed of LDC's.
2. Additions to 6 countries already programmed because of success of project resulting in increased demand.

IV. Role of TA Technical Office; Mondays required

Project requires usual monitoring and responds to requests (i.e. Pakistan and Jordan) for involvement in program.

40 man days required.

Attachment: PAR dated To be prepared June 5, 1975.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 890

Project Title Role of Indigenous Private and Voluntary Organizations, Phase I & II

Contractor a) APHA

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Improved voluntary citizen participation in delivery of health services to poor, rural pop. in LDCs via national VHO activities. 2. Improved information regarding the status of national VHOs in LDCs. 3. Specific techniques for evaluating and strengthening VHOs in LDCs. 4. Increased interaction of national VHOs within geographic regions.	1. Two pilot demonstration projects have been completed and evaluated. 2. Data from 63 countries has been collected and analyzed. 3. Two VHO conferences have been sponsored: East Asia Regional Conference and Costa Rica National Conference. 4. Draft proposals for national (country) demonstration projects received from some VHOs in LDCs, in process of development in others.

II. Project on Schedule; Life-of-Project Budget Accurate?

Project on schedule and budget is accurate.

III. Significant Change(s) in Project Proposed?

After having completed the exploratory and an in-depth data collection/ analysis and pilot demonstration phases of this project, it is proposed that a Phase III Activity be funded.

IV. Role of TA Technical Office; Mondays required

Drafting and monitoring service, 50 man days.

Attachment: PAR dated May 6, 1975

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June 17, 1975

INTRODUCTORY REMARKS

It should be brought to the attention of the reader that this PAR covers only Phase II which was orginally intended to be the end of the project. However, due to the recommendation of the evaluation review members and the APHA in their attached Phase II evaluation report dated October 1974, it was decided by TA/H to develop a Phase III proposal in order to give this activity a broader scope and better assurance of continuation by local indigenous VHO's after project completion.

In addition, there was general agreement in the evaluation review of November 1974, that Phase II was a success and the only issue raised was the doubt as to whether the pilot project in the Philippines would continue on its own initiative. Since that time, APHA has investigated this matter and found that the Philippines Public Health Association is paying for an Executive Director and the organization is functioning well without outside assistance.

PROJECT ACTION SITE REPORT (PASR)

1. PROJECT NO.	2. PAR FOR PERIOD	3. COUNTRY	4. PAR SERIAL NO.
890	June, 74 TO June, 75	Worldwide	

5. PROJECT TITLE

Role of Indigenous Voluntary Health Organizations in Supporting of National Health Organizati

6. PROJECT DURATION: Began FY 70 Ends FY	7. DATE LATEST PROP	8. DATE LATEST PIP	9. DATE PRIOR PAR

$581,186 $307,805

11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)

American Public Health Association	Csd 2801

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X) USAID	HOST	B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
X		This activity should be carried one-step further through a Phase III proposal which will move the project from the concentration, one individual voluntary health organizations to the inclusion and coordination of all voluntary local health organizations in a respective country. This will require a revised PROP and PIO/T.	June 1975

X	X
PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE	MISSION DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE
Amos D. Worthington, Jr. 6/17/75	

CONTENT AND FORMAT OF TAB PROJECT APPRAISAL REPORT

I. Page 1 PAR Face Sheet, AID 1020-25 (10-70)

II. M trix (revised and/or updated as necessary)
(a) Phase II Matrix and (b) proposed Phase III Matrix.

III. Standard/Key Questions

1. Are key inputs being supplied according to plan by: (a) AID, (b) action agent, (c) cooperating countries, (d) multilateral organizations, and/or (e) other donors?

[x] YES [ ] NO If no, explain.

2. Are assumptions regarding the supply of inputs still valid?

[x] YES [ ] NO If no, explain.

3. Rate performance of action agent(s) against plan:

[ ] Outstanding [x] Satisfactory [ ] Unsatisfactory

Comment on key factors determining rating.

INSERT 1

B. Transformation of Inputs into Outputs

4. Given the answers above, i.e., progress to date in supplying inputs, changes in assumptions, etc., is the management hypothesis that the totality of the resources applied to the project will be sufficient to produce the predetermined outputs by the specified target dates still valid?

[x] YES [ ] NO If no, explain.

5. Is the approach or course of action originally selected, i.e., project design and/or methodology, still the most appropriate?

[x] YES [ ] NO If no, what changes need to be made in either inputs, workplans and/or output expectations?

C. Project Outputs

6. List the output indicators, their planned targets, and the actual performance achieved for each during the period under review. 7/

INSERT 2

a. Was actual performance less than planned target?

[x] YES [ ] NO If no, explain.

7/ For this and any other questions or statements, if adequate, reference may be made to the project matrix, issues [illegible], action agent's report, worksheets, or any other attached or readily available documentation.

E. Program Goal

11. Give statement or programming goal--if different from attached matrix--and/or key problem area addressed.

Is it same as in PROP?

X

12. Does achievement of project purpose--in relation to other sector or RFA activity--still have the same priority and significance in contributing to the programming goal?

☒ YES ☐ NO

Cite evidence or justification or explain change.

13. Are assumptions for achieving goal and measures of goal achievement still valid?

☒ YES ☐ NO If no, what changes are necessary?

Are they reflected in attached matrix?

☐ YES ☐ NO

14. If appropriate, comment on project interactions with: (a) other interregional, regional or mission CTS projects; (b) 211(d) institutional grants; (c) interregional or mission research projects; and (d) other U.S. Government agencies.

This activity complements and could also become a valuable input into the TA/H worldwide DEID's project.

b. What changes, if any, are necessary in outputs, output indicators, target dates, and assumptions?

Are they reflected in attached matrix?

[X] YES [ ] NO

c. Do action agent's reports provide adequate progress

[X] YES [ ] NO If no, what action will be taken to correct situation?

NOTE: At the discretion of the Office Director, the following questions may be omitted in an informal (Option I) PROP.

D. Project Purpose

7. Give statement of purpose as currently conceived if different from attached matrix.

a. Is it same as in PROP?

[X] YES [ ] NO

b. Same or consistent with contract/PASA/grant?

[ ] YES [ ] NO Contract expired Oct. 74. New contract expected upon revised PROP approval for Phase III.

8. List conditions which will exist when above purpose is achieved--if different from those in attached matrix--or at any other particular point in project implementation, and cite or refer to evidence to date of progress towards conditions (EOPS).

9. Are critical assumptions for achieving purpose still valid?

[X] YES [ ] NO If no, explain.

10. Is the development hypothesis that the aggregate production of outputs will lead to the creation of a set of conditions at the end of project, i.e., achievement of project purpose, still valid?

[X] YES [ ] NO

Is the rationale as stated in the PROP still sound.

[X] YES [ ] NO

If answer to either question above is negative, what changes are necessary (e.g., redesign, extend or terminate project, increase amount of inputs or production rate, change action agent)?

June 17, 1975

INSERT I

COMMENTS ON KEY FACTORS DETERMINING RATING

The performance against the plan was almost outstanding. The targets of the project have been met promptly and on schedule. The program, while modest, has elicited favorable attention and produced information that promises to be significant in solving the development problems of indigenous voluntary health organizations.

(SEE WORTHINGTON - TRIP REPORT EXHIBIT "C" & "D")

INSERT II

OUTPUT INDICATORS AND ACTUAL PERFORMANCE ACHIEVED

1) Number of country demonstration projects developed - two pilot demonstration projects have been completed and evaluated.
2) Central Information Retrieval System concerning VHO's in LDCs-data from 63 countries has been collected and analyzed.
3) Number of VHO's receiving assistance in LDC's - Korea, Guatemala, Panama and Indonesia have requested consultant assistance.
4) Number of country and regional VHO conferences-two VHO conferences have been sponsored: East Asia Regional Conference in the Philippines and Costa Rica National Conference.

1/ See Project monitors memorandum TA/H, A.D. Worthington, to TA/RIG, Ladenheim dated April 23, 1975, Exhibit "E" attached.

2/ See APHA Phase II Evaluation Report dated October 1974, Exhibit "F" attached.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # HEW/OIH RSSA 1374

Project Title MEDEX Project Planning

Contractor a) OIH/HEW

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Design, testing and refinement of STEM modules. 2. Reconnaissance visits, including building of networks and linkages. 3. Design & planning of MEDEX programs. 4. Consultation to LDCs on health manpower. 5. Selection criteria, admin., support & continuing education of MEDEX graduates. 6. Evaluation, design, field testing, baseline data and reports of analysis.	1. Planning, staff recruitment, program implementation, management, training and evaluation underway. 2. Basic format STEM modules designed. 3. H. manpower training for DEIDS Thailand designed. 4. Iran, Guyana, Chana, Nigeria, Liberia, Sudan, Ethiopia & BLS countries expressed interest plus mission interest in Afghanistan, Dominican Republic & Haiti. 5. Linkages with U.S. MEDEX schools have begun.

II. Project on Schedule; Life-of-Project Budget Accurate?

Project is on schedule and proposed budget is accurate.

III. Significant Change(s) in Project Proposed?

Evaluation component enlarged and expanded.
Continued education of Medex is given increased emphasis as well as management and preceptor training.

IV. Role of TA Technical Office; Mondays required

35 man days annually required.

Attachment: PAR dated 4/7/75

PAGE 1

PROJECT APPRAISAL REPORT (PAR)

1. PROJECT NO.	2. PAR FOR PERIOD	3. COUNTRY	4. PAR SERIAL NO.
	19 June 74 TO 19 June 75	Worldwide	

5. PROJECT TITLE

MEDEX

6. PROJECT DURATION: Began FY 75 Ends FY 79	7. DATE LATEST PROP	8. DATE LATEST PIP	9. DATE PRIOR PAR
	Draft 4/2/75		

10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: $	b. Current FY Estimated Budget: $ 300,000.	c. Estimated Budget to completion After Current FY: $ 2,592,000

11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)

a. NAME	b. CONTRACT, PASA OR VOL. AG. NO.
DHEW, Office of International Health	HEW-RSSA-OIH-13-74
University of Hawaii	Contract ASH-74-722 HHB

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X) USAID	A. ACTION (X) AID/W	A. ACTION (X) HOST	B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
	X		Augment HMD staff skills in: cost analysis; management; preceptor training; continuing education; cross-culture communication	include in Prop design

D. REPLANNING REQUIRES REVISED OR NEW: [X] PROP [ ] PIP [ ] PIO/A [X] PIO/T [ ] PIO/C [ ] PIO/P

E. DATE OF MISSION REVIEW: 3/14/75

PROJECT MANAGER (TYPED NAME, SIGNED INITIALS AND DATE): Merrill M. Shutt 4-3-75

PROJECT OFFICER (TYPED NAME, SIGNED INITIALS AND DATE): Office Lee M. Howard, M.D. 3/4/75

III. Key Questions

A. Project Inputs

1. Are key inputs being supplied according to plan by: (a) AID, (b) action agent, (c) cooperating countries, (d) multilateral organizations, and/or (e) other donors?

[X] YES [ ] NO If no, explain

2. Are assumptions regarding the supply of inputs still valid?

[X] YES [ ] NO If no, explain

3. Rate performance of action agent(s) against plan:

[ ] Outstanding [X] Satisfactory [ ] Unsatisfactory

Comments on key factors determining rating:

Full complement of HMD staff as of December 16, 1974. Quality and productivity of staff reflect program planning. Project on schedule. STEM concept implemented by formulation of design. Testing of adaptability of MEDEX to LDC environment provided by Micronesia and Thailand experience. Input into DEIDS/Thailand Project by training of LDC staff. Field visits made to four LDC's. Communication initiated with National MEDEX Programs, National Council for MEDEX, WHO and Private Voluntary Agencies.

Once local medical establishments see that its control of medicine has not been threatened they become enthusiastic supporters. Initial physician involvement in project planning essential. Physicians in Thailand and Micronesia now do not perceive the MEDEX Program as a threat to their profession.

B. Transformation of Inputs into Outputs

4. Given the answers above, i.e., progress to date in supplying inputs, changes in assumptions, etc., is the management hypothesis that the totality of the resources applied to the project will be sufficient to produce the predetermined outputs by the specified target dates still valid?

[X] YES [ ] NO If no, explain

5. Is the approach or course of action originally selected, i.e., project design and/or methodology, still the most appropriate?

[X] YES [ ] NO If no, what changes need to be made in either inputs, work plans and/or output expectations?

Comment

The Review Panel recommended five areas needing attention and based on experience of contractor to date:

a. Data and analysis required to determine host country costs or to judge the cost of a MEDEX Program against alternative health manpower programs.

b. Training of local or central government institutions in the complexities of program management.

c. Strengthening of preceptorship role.

d. Development and implementation of an educational support mechanism for MEDEX graduates.

e. The extension of STEM technology across cross-cultural barriers.

An increase in staff would allow for completion of project design and greatly facilitate project purpose.

C. Project Outputs

6. List the output indicators, their planned targets, and the actual performance achieved for each during the period under review.

a. Was actual performance less than planned targets?

[X] YES [ ] NO If no, explain

Comment

The PROP which delineates the specific output indicators of this project was being formulated during the time the actual evaluation review took place. An analysis of the contractor's quarterly reports of activities accomplished and comparison of OIH RSSA scope of work, demonstrates contractor met planned targets. It is noted this review covers eight of the 12-month contract.

b. What changes, if any, are necessary in outputs, output indicators, target dates and assumptions?

Are they reflected in attached matrix?

[X] YES [ ] NO

Comment

Review panel changes pertinent to future activities are incorporated into the Matrix.

c. Do action agent's reports provide adequate progress data for monitoring and analysis?

[X] YES [ ] NO If no, what action will be taken to correct situation?

Comment

It may be noted that verbal reporting was continuous throughout the contract period; written reports were tardy in submission.

D. Project Purpose

7. Give statement of purpose as currently conceived if different from attached matrix.

a. Is it same as in PROP?

[X] YES [ ] NO

b. Same or consistent with contract/PASA/grant?

[X] YES [ ] NO

8. List conditions which will exist when above purpose is achieved - if different from those in attached matrix - or at any other particular point in project implementation, and cite or refer to evidence to date of progress towards conditions (EOPS).

Comment

Goal path and strategy of project is valid as presently conceived. It is recognized that contractor has had only 8 months experience and there is no evidence at this time project implementation plan should be changed or altered.

9. Are critical assumptions for achieving purpose still valid?

[X] YES [ ] NO

10. Is the development hypothesis that the aggregate production of outputs will lead to the creation of a set of conditions at the end of project, i.e., achievement of project purpose still valid?

[X] YES [ ] NO If no, explain

Is the rationale as stated in the PROP still sound?

[X] YES [ ] NO If no, explain

If answer to either question above is negative, what changes are necessary (e.g., redesign, extend or terminate project, increase amount of inputs or production rate, change action agent)?

E. Program Goal

11. Give statement or programming goal--if different from attached matrix--and/or key problem area addressed.

Is it same as in PROP?

[X] YES [ ] NO

12. Does achievement of project purpose--in relation to other sector or KPA activity--still have the same priority and significance in contributing to the programming goal?

[X] YES [ ] NO

Cite evidence or justification or explain change.

Comment

The provision of adequate mid-level manpower is seen by numerous authorities as a priority element in modernizing LDC health delivery systems and extending health services to reach the poor majority in LDC's. Evidence for this is cited by the Senate Committee on Appropriations, Report (94-39), March 17, 1975, pg. 55, "Many authorities in the field of health services regard para-medical activities as one of the best ways to provide low-cost direct assistance to rural areas...", by current input into DEIDS/Thailand Project and receptivity of health personnel to concept in countries visited.

13. Are assumptions for achieving goal and measures of goal achievement still valid?

X	YES		NO	If no, what changes are necessary?

Are they reflected in attached matrix?

14. If appropriate, comment on project interactions with: (a) other interregional, regional or mission GTS projects; (b) 211(d) institutional grants; (c) interregional or mission research projects; and (d) other U.S. Government agencies.

Comment

By design, this project is meant to respond to Agency/Mission projects and geared to react to specific requests by LDC governments. Project evaluation activity as anticipated will build upon current HEW experience and technology in U.S. Training component will be linked to on-going AID/W Harvard contract to teach teachers to teach.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 931-11-580-055

Project Title Colombia Health Delivery System (AID/ta-c-1125)

Contractor a) Tulane University School of Public Health

b) Universidad del Valle - Subcontractor

I. Implementation Progress

Contract signed December 13, 1974; subcontract signed Feb. 19, 1975, project activities initiated Dec. 13, 1974. TA assistance is being provided by Tulane to PRIMOPS to plan and design an evaluation component for PRIMOPS HDS Model.

Outputs	Progress to Date & Relationship to Project Purpose and Goal
a. A Model health delivery system b. Evaluation system c. Written evaluation methodology and published results of evaluation research d. Trained personnel	Project activities have been underway about six months. a. 3 of 5 Modules (health posts) in UVP area established; purpose to provide outreach services in UVP area in order to reach 80% of target POP b. Evaluation methodology being developed on schedule. c. Will follow (b) above. d. On-job training in process.

II. Project on Schedule; Life-of-Project Budget Accurate?

Two Colombian evaluators, delayed arrival but studies underway LOP budget cannot exceed appropriated funding.

III. Significant Change(s) in Project Proposed?

Project operating five months no significant changes reported at this time. 1st progress and financial quarterly report due o/a 15 May 1975.

IV. Role of TA Technical Office; Mondays required

On-site visits for monitoring at input to output level; coordination with USAID/Bogota, and concerned bureaus.

Review of contractor reports - problems & progress; participate in annual project reviews. 96 man days/year

Attachment: PAR dated due August 1975

Small Activity Requirements

KPA: (11) Health Delivery Services
Project: Special Projects

Funding Requirements
FY 76 - $1,000.00

APHA Exhibit

TAB funds are required to cover the cost of shipping and associated costs for the exhibit entitled, "AID Promotes Institutional Linkages for Improved Health in the Developing World", to Chicago, Illinois for the annual meeting of the American Public Health Association, November 16 - 19, 1975.

The purpose of the exhibit is to illustrate to a possible audience of over 5,000 participants, AID's role in promoting integrated health delivery services in devleoping countries in cooperation with other organizations and institutions.

The exhibit was constructed last year and will be utilized again this year with only minor up dating of information required. TA/H, TA/N, PHA/POP and Disaster Relief jointly planned the exhibit and will share responsibility for manning it at the APHA meeting.

KPA: (11) Health Delivery System
Project: An Analysis of Flow Diagrams in the Training of Health Workers

Funding Requirements		
FY 76:	IQ:	FY 77
25,000	0	0

Activity:

A. Testing the feasibility of flow diagrams in development of training skills

1. Background

The major roadblocks to rural health improvement in many settings are in one sense reasonably simple: not allocating resources for rural needs, and not understanding how to implement rural programs utilizing local workers with limited skills, training and support. This pilot study on logical flow is a practical step towards management of training and support. Besides supplementing and complementing more fully trained health workers, it is hoped that auxiliaries will come directly from the people they serve and thus be more responsive to their needs and more effective in promoting their health. Training auxiliaries is a difficult matter. Who should be taught? How much? How well? How long? By whom? With what materials? With what supervision? With what follow-up? and are they effective? Perhaps these puzzles cannot be solved in isolation but only as part of extensive societal self-examination and change. Also the puzzles should be solved.

Logical-flow diagrams in clinical medicine explicitly direct a health worker to collect data about a patient and to take actions based on the data obtained. The procedure has been used successfully in the U.S. by auxiliaries in the diagnosis and management of upper respiratory diseases, stable diabetes and hypertension, vaginitis and urinary tract infection and in the reading of roetgenograms. In the developing world one auxiliary training program has used a modified logical-flow procedure, and another is in the early stages of implementation by the Government of Afghanistan and MSH. The putative advantages of logical-flow diagrams over customary teaching methods and standing orders are several:

a) They more efficiently teach medical material, expecially to new health workers, and support a degree of uniformity of care.

b) The course of action in a logical-flow chart has a definite beginning, direction and end, making the charts fun to learn and use.

c) The method of learning about one illness can be generalized to others.

d) The flows may be simplified or made more sophisticated to suit the level of training of the class of health workers using them.

e) Methods of data retrieval for supervisory, management, and epidemiologic purposes can be readily designed from the forms with a minimum of paper work.

This study proposes to:

1. Survey the ways in which flow diagrams have been used in training of paramedical personnel and summarize in detail the reasons for success or failure of these programs.

2. Survey paramedical training centers to assess their interest in and desire for new training methodologies and to catalogue their reactions to the flow diagram concept.

3. Integrate a short, well defined training session utilizing flow-diagrams in 3 - 5 training centers to document the reaction and understanding of trainees.

2. Justification for the Study

Clinicians the world over appreciate five axioms about Disease:

a) Only a few diseases comprise the bulk of human illness;

b) Most illnesses are self-limiting;

c) Most illnesses are manifested by readily recognized signes and symptoms;

d) Most illnesses may be easily succored or cured by simple medicines and remedies; and

e) Steps to prevent many serious diseases are specific, easy and often inexpensive.

Then it would seem possible that a few simple instructions to deal with common situations could permit even slightly trained auxiliaries to provide good ameliorative, curative and preventive care for the majority of illnesses. There are too few doctors and nurses to serve, even marginally, the pressing needs of the world's population. The shortage is worse felt in the developing countries where the cost of producing new professional staff is prohibited. Hope is thus pinned on the training of auxiliary health workers.

3. General Purpose Output and Implementation of the Activity

Goal: This project addresses itself to improvement of rural health in developing countries.

Specific Objective: The purpose is to examine the practical potential of logical flow diagrams as a major innovation for auxiliary worker training.

Expected Output: A more detailed assessment of the receptivity of both the trainers and trainees to the development and use of logical flow diagrams as a major training tool.

Activity Implementation: Approximately eight months will be required for the study, with tasks divided into four parts:

a) Background analysis/Literature Review
During this phase of the study, MSH will accumulate all relevant experiences with logical flow diagrams and select sites to be studied in depth. Indications are that Tanzania, Kenya and Zaire in Africa, Columbia in Latin America, and Afghanistan and Indonesia are promising candidates for initial screening and study.

b) Training site survey
Training sites where significant auxiliary training is taking place will be surveyed to determine: the characteristics of the training provided; the extent to which new training methodologies would be acceptable and the reaction to the flow diagram concept.

c) Field Site Visits
Selected sites will be visited for more intensive study. In these sites a flow diagram training session will be undertaken to determine if the concept is understood by the trainees. Areas of success or failure will be documented.

d) Documentation:

The major output of the study will be an estimation of the extent to which flow diagrams can be practically integrated into paramedical training programs and the usefulness of further study into this type of training methodology. This will be documentated.

Agency Work Relationships: The primary commitment of "MSH" is to field support public health program management rather than to any particular methodology. Projects in the past have ranged from short-term TDY analysis to full-time field teams of several professionals posted in developing country ministries. In

collaboration with LDC governments, AID Missions and other national and international organizations, MSH staff members are actively involved in Rural Health Development and Training of Auxiliaries, with programs in the Philippines and Afghanistan with continued contacts in Colombia, Tanzania and Indonesia. This type involvement of governments and agencies will continue.

Reporting Plans: Documentation, publication and dissemination of results should be completed four months after completion of study.

Manpower Requirements: On average, 2/3 of MSH work is international in focus and 90 percent executed by full-time MSH professional staff from its headquarters in Cambridge, Massachusetts or from field offices in Manila and Kabul. MSH staff of 20 has formal training and experience in medicine, management sciences and information systems, public health, systems analysis, education, public administration, anthropology and computer science. One MSH Physician will be in charge of this project and assisted by one Health Systems Analyst. The project will make use of other MSH staff as and when needed. Appropriate AID staff will be needed to assist with monitoring.

Narrative Introduction to Health Planning 931-11-590-H 12

The goal of KPA 12, Health Planning, is to improve the efficient allocation and equitable distribution of LDC health sector resources in order to improve the health status of LDC populations. Currently, a major portion of health resources are inefficiently utilized and inadequately allocated to meet stated national health goals due to limited national planning capability and problem identification in LDCs.

The activities supported in health planning are all focused on improving national health planning capability in both ministries of Health and National Planning Organizations. Projects supported include: 1) training of LDC personnel in both micro and macro health planning skills, 2) research on the effectiveness of alternative health sector interventions to improve health and the impact of activities in other sectors on health, and 3) development of LDC capability to better implement health sector programs.

One of the most important efforts for which technical support is provided is in the implementation of focused health planning and assessment activities by LDC institutions as an integral portion of AID health project development. This activity is considered as one of the most immediately productive ways to increase national health planning capability in that it provides the opportunity and the incentive to carry out structured analysis and planning activities.

The major portion of technical support to LDCs, Regional Bureaus, and Missions provided by staff, RSSA and contract personnel is applied to this effort.

Considerable amounts of technical assistance are also provided to Regional Bureaus, AID Missions and LDC governments for the further development of LDC institutional capability in health planning as a part of AID health loans and grants. It is expected that this area of technical support will increase rapidly as more field projects in health are developed.

TA/H also works with WHO, the international banks and others interested in the health sector to coordinate planning.

Two important areas where agencies complement each other are: (1) WHO, the organization most active in health planning, interfaces with Ministries of Health while AID interfaces with national planning offices. The organizational loci imply that AID planning efforts are more multisectoral in their approach and economically rigorous in their content. (2) AID has greater experience and capacity in applied data gathering and analysis activities while WHO has greater capacity to provide technical assistance to Ministries of Health. Both AID and WHO expect that their future support to the health sectors of LDCs will be based on a formalized planning effort.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
Office of Health

2. Document #1 -- PID
Status: New ☐ Revision # ____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
7/15/75

3. Project Number

4. Bureau TAB Code 6

5. Project Title
A. Preparation of Guidelines for Health Sector
B Analysis

6. Estimated Initial/Final Obligation
FY 76 FY 76

7. Estimated Cost (Life of Project)
($000 or equivalent. $1= ____)
AID Approp. $150.00
Other U.S. ____
Total U.S. ____
Host Govt. ____
Other Donor(s) ____
Total ____

8. Purpose Code
Category KPA Code 12

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			$150			
Total			$150			

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal
To improve the official allocation and ~~equivalent~~ equitable distribution of LDC health sector resources to improve the health status of LDC population.

13. Project Purpose(s)
To develop a series of "how to" manuals to analyze programmatic and infrastructure portions of the health sectors in LDCs.

14. Planning Resource Requirements (Staff/Funds)
None

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: ____

84

I. Summary of the Problem to be Addressed and the Response to the Problem

In order to assure quality of AID supported projects in the health sector and to pursue AID interests in improving health planning capability, health sector assessments precede most substantive AID health sector investements. Considerable experience has been accrued in several countries in carrying out moderate to large-scale assessments. This experience indicates that even though it is most appropriate to tailor analytical techniques to particular situations, there are many common elements which must be addressed in preliminary stages of assessments. Large amounts of time and effort are required to orient health sector assessment groups to these common analytical efforts.

It is proposed that a series of "how-to" manuals for analysis of various elements of the health sector be developed or existing manuals be modified. It is anticipated that 7 such manuals will be required, with an average of 4 man months required for the preparation of each one. It is proposed that this project be completed in FY 1976.

The major assumption pertinent to project success is that a series of "how-to" manuals will introduce efficiencies in the undertaking of health sector assessments in LDCs, and assure that all of the criteria are assessed.

The coordination of this activity with WHO will be discussed in the annual coordination meeting with WHO in July.

The realistic alternatives to this project are the investment of large amounts of consultant time to orient each LDC health sector assessment group to common elements of health sector analyses. In fact, this is the strategy

which has been followed in health sector assessments to date, and this project is proposed due to the difficulty in obtaining sufficient personnel of the required quality to accomplish tasks in this way.

The direct beneficiaries will be planning agencies of LDCs. Indirect beneficiaries include all those populations affected by projects which emanate from planning groups.

II. Financial Requirements and Plans

Estimated project cost is $150,000, i.e. approximately $20,000 each for 7 manuals. It is proposed that this be supported completely by TAB grant funds. It is further proposed that separate contractors be chosen according to their capability to produce particular manuals, rather than utilizing a single organization.

III. Development of the Project

Several proposals have already been received. A project proposal or proposals can be developed by June 15, 1975. It is proposed that all project activities be completed by March 15, 1976. Only two man weeks will be required to complete project development.

IV. Issues of a Policy or Programmatic Nature

Health sector assessments have been, and are being, supported by Regional Bureaus and USAID Missions, depending on TAB for overall and country-specific guidance. This project will form a major element of TAB's capability to respond to a rapidly increasing demand for supervisory and guidance services.

Areas for Development of Health Sector Assessment
Manuals under Contract

1) environmental health

2) communicable diseases

3) facilities

4) drug supply systems

5) health manpower

6) health information systems

7) budgeting and financing systems

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
Office of Health

2. Document #1 -- PID
Status: New ☑ Revision # ____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
Dec. 76

3. Project Number

4. Bureau Code
TAB 6

5. Project Title
A. Health Information Exchange
B

6. Estimated Initial/Final Obligation
FY 76 FY 81

7. Estimated Cost (Life of Project)
($000 or equivalent. $1= ____)
AID Approp. 500
Other U.S. ____
Total U.S. 500
Host Govt. ____
Other Donor(s) ____
Total 500

8. Purpose Code
Category Code ____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			190		500	
Total			190		500	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal

To improve the efficient allocation and equitable distribution of LDC health sector resources in order to improve the health status of LDC populations.

13. Project Purpose(s)

To establish an exchange mechanism to permit immediate access to key sources of information with U.S. and overseas which relate to the AID health program.

14. Planning Resource Requirements (Staff/Funds)

PSC Consultant. 60 days. $6,100

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W, or for AID/W Documents; date of Distribution: ____

Summary of Problem to be addressed

To effectively plan programs in AID's principal health areas and to effectively design collaborative programs with other donors, as required by the Congressional mandate, better access to sources of information on international health is required. Increasing involvement of U.S. private and voluntary agencies, U.N. organizations, other bilateral donors, and LDC's themselves requires full-time staff to identify the spectrum of resources. Resource flows in health from developed to developing countries approximate $500 million, less than half of which comes from the United States. Adequate knowledge of the purpose, direction, and amount of these flows is becoming mandatory for efficient planning. Today, there is no resource or mechanism internationally to gather, collate, and exchange this information for practical programming purposes.

Project Purpose

To establish in the United States, e.g. with the Institute of Medicine of National Academy of Sciences, a small focus to gather, collate, update, and distribute information on the basic sources of international health information with United States and overseas.

Resources Required

One or two full time professional staff with skills in information management and exchange. Precise definition will be dependent on a 60 day PSC consultant study of requirements and location options.

Disbursement Period

Beginning in FY 1976, the service would be continuous, subject to AID evaluation.

Issues of a Programmatic Nature

TA/H could propose a direct staff activity. Staff limitations require a convenient alternative which might include IOM/NAS and the APHA.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
Office of Health

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document: PP
Proposed Date of Submission: 7/30/75

3. Project Number

4. Bureau TAB **Code** 6

5. Project Title
A. Institutional Support Contract LDC Research
B

6. Estimated Initial/Final Obligation
FY 76 FY 77

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = ____)
AID Approp. 305
Other U.S. ____
Total U.S. ____
Host Govt. ____
Other Donor(s) ____
Total ____

8. Purpose Code
Category KPA Code 12

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			155		305	
Total			155	305		

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal
To improve the efficient allocation and equitable distribution of LDC health sector resources in order to improve the health status of LDC populations.

13. Project Purpose(s)
1) To determine the efficiency with which the various available technologies can effect the major health problems of LDCs.

2) To develop a portion of the information base required for health sectoral analyses.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: ____ 9/

1. Summary of problem to be addressed and the proposed response to the problem:

A project is proposed to provide general technical backstopping and enhance the quality of cost effectiveness studies supported by the Agency with overseas institutions.

This project seeks to expand the store of knowledge concerning the effectiveness of alternative resource allocations in changing the health of populations. This project is complementary to other projects in this area and its specific outputs are:

1) Development of a comprehensive research strategy in this area;
2) Provision of technical assistance to LDC institutions carrying out studies in the area of efficiency of delivery of health services;
3) Identification of opportunities in carrying out additional studies utilizing LDC personnel and institutions;
4) The identification of LDC institutions which could be developed to become active in sponsoring and backstopping research in the area of efficiency of health interventions.

It is estimated that 32 m.m. annually of technical services are required to carry out the activities listed. They will be divided into functional areas as follows:

health economics	14
operations research	11
epidemiology	3
graduate students in economics	4

The major assumption pertinent to project success is that a research strategy oriented toward LDC institutions assuming major responsibility for undertaking operational research in the areas of cost effectiveness of health measures and freely accepting technical advice from a U.S. institution will be viable.

To date, two research projects have been funded: (a) cost effectiveness of alternative health measures - National Planning Office, Government of Colombia and (b) analysis of INCAP nutrition data - INCAP, Guatamala. This project would relate directly to these two activities. Other donors are not sponsoring operational research of this type, although there is agreement by personnel of other international organizations that such operational research efforts are useful. The lack of activity of other agencies in this area is due chiefly to policy and budgetary constraints of their organizations.

It is expected that the results will be generalizable to the extent they will be equally useful to the planning process of all LDCs. Dissemination will take place through (1) AID distribution, (2) journals and (3) conferences.

A realistic alternative to this project would be to fund individual research projects with U.S. institutions to assure the provision of appropriate technical skills to carry out the research activities. We have chosen, however, to invest LDC institutions with major project responsibility and with this project attempt to assure the provision of relevant expeditious technical services to the primary contractors.

All resources are anticipated to be AID research grants funds. No LDC or other donor contribution is expected.

III. Development of the Project

Site visits have been made to potential contractors by the project monitor and it has been determined that five institutions currently have the resources to undertake this activity. No further feasibility study or analysis is comtemplated.

The schedule for project completion is:

1) Submit PP in July 1975

2) Complete contract January 1976

3) Complete disbursement FY 77

It is expected that 10% of the project monitor's time will be required during the six months June - December 1975, to complete the project development.

No other AID resources are expected to be required.

IV. Issues of a Policy or Programmatic Nature

This project is a complementary one to a series of existing and proposed research projects on the economics of health. This project is indispensible if the strategy of funding specific research projects to LDC institutions is to be continued.

The direct beneficiaries of the project will be planners and decision makers in LDCs. If the purposes of the project are realized and implemented , indirect beneficiaries will encompass the entire society and will specifically address those segments of the population currently disenfranchished from the health sector due to skewed resource allocation patterns. The major non-contract project funding will be for conferences to disseminate findings of the group of research findings. The contract funding contemplates the costs of network tie-ins and field support.

Some five potential contracting institutions have the capability to immediately field the level of effort described in this project.

It is suggected that formal competition between the potential contractors would be to the best interest of the Agency.

II. Financial Requirements

Salaries and Wages	66,000	70,000
Consultants	5,000	5,000
Allowances	6,500	7,000
Travel & Transportation	9,000	9,000
Overhead	59,000	56,000
Equipment & Supplies	2,000	2,000
Conference	10,000	
	157,500	150,500

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/Grantee
Office of Health

2. Document #1 -- PID
Status: New ☐ Revision # ____ ☐
Proposed Next Document:
Proposed Date of Submission:

3. Project Number

4. Bureau Code
TAB

5. Project Title
A. Efficiency of Health Measures:
B Cost Effectiveness of Alternative Health Measures: Infant Mortality and levels of Malaria Control

6. Estimated Initial/Final Obligation
FY I.Q. FY 77

7. Estimated Cost (Life of Project)
($000 or equivalent, $1= ____)
AID Approp. $500
Other U.S. ____
Total U.S. ____
Host Govt. ____
Other Donor(s) ____
Total ____

8. Purpose Code
Category Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			$237			$500
Total			$237			$500

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal
To improve the efficient allocation and equitable distribution of LDC health sector resources in order to improve the health status of LDC populations.

13. Project Purpose(s)
1. To determine the efficiency with which the various available technologies can effect the major health problems of LDCs.
2. To develop a portion of the information base required for health sectoral analyses.

14. Planning Resource Requirements (Staff/Funds)
A three day meeting by a 3-4 man advisory group will be required.

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W. or for AID/W Documents; date of Distribution: 95

I. Summary of the Problem to be Addressed and the Proposed Response to the Problem

There exists reasonably common agreement that the ways in which major portions of health resources that are spent in LDCs do not efficiently address the health problems of those countries. A major determinant of this situation is that decision makers do not have access to accurate information concerning the impacts of alternative allocations of resources on health. The lack of accurate information of this type has proven to be an important impediment to carrying out high quality sector assessments. The problem areas this paper addresses as well as that of ongoing research have been identified as the result of experience in health sector assessments. It is expected that knowledge developed under this project will be generalizable to other settings thus avoiding the expenditure of large amounts of monies to gather similar information in each site. This project will add onto two projects already initiated to provide additional knowledge in this area.

This project seeks to expand the store of knowledge concerning the effectiveness of alternative resource allocations in changing the health of populations. The project will select a programmatic area or areas and analyze the efficiency with which health sector intervention influences health changes. The two alternatives for which data sources are known to be available are (1) cost effectiveness of preventing infant mortality and (2) cost effectiveness of malaria control alternatives. Both these project alternatives address important health problems, areas which spend large amounts of health

sector resources and are ones where critical information gaps have been identified in the implementation of health sector analyses. The project outputs necessary to the achievement of the project purpose are the quality and relevance of the research findings to health sector decision making.

It is expected that since existing data sources will be utilized for the project that principle project inputs will be technical and analytical in nature with some 90-100 m.m. of technical manpower and 50-100 hours of computor analysis time. Existing data sources will be utilized since collection costs considerably more than total costs of this project.

The major assumptions pertinent to project success are: (1) the existence of analytical techniques to carry out the research and (2) the accessibility of pre-existing data sets is necessary to carry out the research within the resources identified.

It is expected that an LDC institution will collaborate in the project. It is also expected that PAHO or WHO will collaborate by assisting in mobilizing the required data set and in provision of technical assistance. Discussions have already taken place with WHO.

The major assumption pertinent to project success is that a research strategy oriented toward LDC institutions assuming a major responsibility for undertaking research in the areas of cost effectiveness of health measures and freely accepting technical advice from a U.S. institution will be viable.

To date, two research projects have been funded: (a) cost effectiveness of alternative health measures - National Planning Office, Government of Colombia and (b) analysis of INCAP nutrition data - INCAP, Guatemala. This project would relate directly to these two activities. Other donors are not sponsoring research of this type, although there is agreement by personnel of other international organizations that such research effects are useful. The lack of activity of other agencies in this area is due chiefly to policy and budgetary constraints of their organizations.

The state-of-the-art for carrying out studies of this type does not lend itself to a generalizable statement. Considerable work has been done in this field as regards some preventive medicine programs, particulary vaccination programs in both LDCs and More Developed Countries. In a few areas such as treatment of acute coronary episodes, intracranial hemorrhages, some kidney diseases and some carcinomatous conditions carefully controlled work has been done in the U.S. and in England. An INCAP sponsored study in Guatemala early in the 1960's attempted to assess the relative impacts of nutrition, sanitation and simple medical care on infant mortality. Thus the techniques and methods exist to carry out studies of this type proposed but they have not been applied to any great extent to those health problems which are of greatest importance to LDCs. The importance of carrying out the type of study proposed has been stated in the Key Problem Area statement as well as identified in a feasibility study conducted by the Johns Hopkins University. There is a general consensus on the part of both LDC and MDC health planners that information of the type to be developed by the proposed research

is of critical importance if the efficiency of health service delivery systems is to be significantly improved.

The World Bank in its development of a health sector policy, has accorded the type of information to be developed by this research, great importance in the identification of appropriate areas for the Bank to undertake projects.

The principle management considerations are those involved in the selection of LDC contractors and the working out of collaborative arrangements to maximize the benefits of this project in terms of both quality of the information developed and the development of LDC institutions to carry out this type of research.

II. Financial Requirements and Plans

The best estimate of the costs of the alternative projects is $250,000. All the costs are proposed to be AID grants. The studies are expected to take advantage of pre-existing data sets which cost more to generate than the funds allocated to this project.

III. Development of the Project

Preliminary work has been done on each of the project alternatives. Initial drafts of project proposals have been prepared. Both projects, however, require additional conceptual work as well as further exploration with the data source agencies (PAHO and CDC).

The schedule for completion of the projects is a follows:

submit PP December 15, 1975;

complete contract May, 1976.

It is estimated that the completion of this project will require 15% of the project monitors time between June 1975 and March 1976. The project monitors effort may need to be complemented with OIH/PASA personnel time. One trip by the project monitor or other staff individual to Atlanta, Georgia and El Salvador for further exploration of cost-effectiveness of malaria control project. A small advisory committee will be utilized to work out initial details of the study of alternative levels of malaria control. Other exploratory efforts can be done within current travel plans of project monitor.

Agency for International Development
Project Identification Document Face Sheet
Part I to be completed by originating Office

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/Recipient
Worldwide

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
September, 1975

3. Project Number

4. Bureau Code
TAB 6

5. Project Title
A. Appraising Health Management Systems
B.

6. Estimated Initial/Final Obligation
FY 76 FY 76

7. Estimated Cost (Life of Project)
($000 or equivalent, $1= ____)

AID Approp.	146.8
Other U.S.	
Total U.S.	146.8
Host Govt.	
Other Donor(s)	
Total	146.8

8. Purpose Code
Category Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Funding Source	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
GTS Contract		146.8		146.8	
Total		146.8		146.8	

11. Other U.S.

	1st Yr	All Yrs
Total		

12. Project Goal

To improve the sectoral management capacity so that good health service is available to the majority of the population.

13. Project Purpose(s)

To develop a methodology capable of being adapted to various LDC conditions which will enable LDC health planners and administrators to appraise, evaluate, and improve the management of their health sector.

14. Planning Resource Requirements (Staff/Funds)

1 Direct hire
2 MM. AID consultant $6,000

15. Originating Office Clearance
Signature: [signature]
Title & Date: Acting Director, TA/DA 6/10/75

Date Received in AID/W or for AID/W Documents; date of Distribution: 101

Project Identification Document

Appraising Health Management Systems

The Problem

The health sector analyses conducted by AID are confirming that there is a critical lack of information about the effectiveness of health management systems in LDCs. There is at present no reliable tool that can be used to provide health planners and administrators knowledge on how well their management practices are working or where improvement is needed. The problem then, is how to appraise the strength and weaknesses of these management systems in a way related to the overall health sector. The problem concerns the interrelations among health organizations as well as the internal systems within each organization. A methodology is needed to do this in the context of the LDCs and the AID approach to sectoral analysis and plans.

This project fits into the overall KPA goals of improving sectoral management capacity and closing the plan-performance gap in the health sector. It also is in accordance with the findings of the Hall Work Group which has recommended significantly increased emphasis on management problems in AID projects.

Project Purpose

Development of a methodology for analysis of health management systems will improve the "actionability" of the health system by increasing the capacity of system managers to assess the situation accurately, implement plans and programs, reduce costs, and expand coverage. The purpose is to improve the effectiveness and efficien of management systems, the "infrastructure" of the sector, so that good

health service is available to the majority of the population.

Outputs

The end product of the project will be a methodology to appraise the strengths and weaknesses of management systems in health organizations and programs in LDCs.

Technical Resources

To develop this methodology it is estimated that twenty man-months of professional work will be needed. The work will require expertise in planning, programming, policy formulation, health statistics systems, management information systems, evaluation systems, accounting, auditing, organizational structure, facility maintenance, and supply and equipment management.

The proposed duration of the project is twenty-four months with all of the funds being committed in FY 76.

Assumptions

The major assumptions on which the success of this projects rests are:

1. That there are sufficient data and techniques available to make the results significant.
2. That interested agencies, governments, and institutions will utilize the methodology produced..
3. That the resultant methodology will contribute to better health services for the poor in LDCs.

Alternatives

The first alternative considered was to observe the efforts of others in the field and attempt to derive a methodology from that. This method, however, would be too slow and would not provide complete coverage of health management systems. The second alternative was to simply conduct a literature search and distill a methodology from previous work. After a bibliographical search, however, it was determined that the literature is not adequate to support such an undertaking. The present project will include both of the above alternatives within its design, but will go beyond them to examine health management systems thoroughly and produce a methodology which is health specific.

Beneficiaries

The direct beneficiaries of this methodology will be health planners and managers in LDCs who will use it to develop and manage health projects more effectively. The indirect beneficiaries will be the whole population which will receive improved health care as a result of the advances made possible by use of this methodology.

Spread Effects

This methodology should be applicable to all LDCs and it is hoped that it will be widely utilized. The techniques developed will be replicable.

Financial Requirements and Plans

The estimated cost of this project is about $147,000. This will be in the form of a GTS contract with a U.S. institution. The budget breakdown is as follows:

Category	FY 76 Amount ($000)	MM
Personnel Service	60	20
Overhead	41.8	
Travel & Per Diem	8	
Workshops	25	
Publication & Translation	12	
	146.8	20

Development of the Project

The basic outline of this project was first proposed to TA/DA by Mr. William Worcester and Dr. Joe Davis of TA/H. Taking this suggestion and building on it, an AID consultant conducted studies to determine the feasibility of developing such a methodology for health management. Based on a literature search and interviews with experts in the field he has found that there is a great need for the proposed methodology. Dr. John Daly, HEW Sector Analysis, has reviewed the project and his comments have been incorporated into its design. These sources will continue to be drawn upon in further development of the project. Additional work must be done to produce a more detailed technical statement concerning the kind of end-product that is desired and the methods and potential resources to be used in the project. It is estimated that this will require two more months of consultant's time.

As now planned, the PP will be submitted in FY 76. This is dependent, however, on the TA/DA office receiving a direct hire specialist in this field to prepare the final version of the PP and then manage the project.

Agency for International Development
Project Identification Document Face Sheet
Part I to be completed by originating Office

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/Recipient
Worldwide

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
September, 1975

3. Project Number

4. Bureau Code
TAB 6

5. Project Title
A. Training Materials in Health Management
B.

6. Estimated Initial/Final Obligation
FY 76 FY 78

7. Estimated Cost (Life of Project)
($000 or equivalent. $1=)
AID Approp. 273.5
Other U.S. ____
Total U.S. 273.5
Host Govt. 150.0
Other Donor(s) ____
Total 423.5

8. Purpose Code
Category Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Funding Source	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
GTS Contract		84.0		273.5	
Total		84.0		273.5	

11. Other U.S.

	1st Yr	All Yrs
Total		

12. Project Goal

To improve the sectoral management capacity so that good health service is available to the majority of the population.

13. Project Purpose(s)

To develop a network of regional training institutions, offering courses for top-level staff in systems approaches to managing the health sector and its major management systems.

14. Planning Resource Requirements (Staff/Funds)
1 Direct hire
2 MM, AID consultant $6,000

15. Originating Office Clearance
Signature:
Title & Date: ~~Acting Director, TA/DA 6/10/75~~

Date Received in AID/W or for AID/W Documents; date of Distribution:

Project Identification Document

Training Materials in Health Management

The Problem

The health sector analyses conducted by AID are confirming that a shortage of trained administrators is a basic constraint to improvement in coverage, efficiency, and quality of health care in LDCs. For example, the sector policy statement of the Africa Bureau signals this deficiency as one of the top priorities for AID assistance in African countries.

Within the overall shortage of trained administrators, there is a key component: the need to train top-level executives and staff. It is more difficult to train subordinates and to effectuate system changes when the top officials are not familiar with the concepts and techniques of management, and it is difficult to train executives in the same groups as their subordinates. Moreover, the training content of advanced schools of administration in LDCs tends to teach principles of management in the abstract since there is insufficient training material and documentation on how to manage health at the sectoral level. This problem comes under the Health Planning KPA which has the objective of expanding and improving sectoral management capability. It has also been addressed by the Hall Work Group which has recommended significantly increased emphasis on developing management skills in AID projects.

Project Purpose

This project will increase the number and quality of health sector managers. The purpose is to stimulate a network of regional xxxxgxxx training institutions, offering courses for top-level staff in systems approaches to managing the health sector and its major

management systems. This project will be initiated in Latin America and involve a contract with the Getulio Vargas Foundation to develop a prototype curriculum and training materials for use by other institutions in the region--national and subnational, public and private. Based on the experience with Latin America similar regional programs may be worked out in Africa and Asia with the development institutions linked in an information exchange network to accelerate the learning process.

This project will contribute significantly to closing the plan-performance gap which is a discouraging feature of the health system in many LDCs. The sector goal of improved health service for the poor majority will be advanced by the improved management capability the project will help develop.

Output

The output of the project will be a fully developed and tested training program consisting of an up-to-date curriculum, training materials, practical exercises, and learning methodology suitable for the above purposes and judged effective for these purposes by those who have received the training and by outside evaluators.

Technical Resources

Development of the training curriculum and implementation of it in Latin America will require an estimated eight man-months of work by U.S. personnel and four man-months of work by local personnel. Expertise is needed in the areas of health management, curriculum development, and curriculum evaluation. To develop courses for Africa and Asia, similar skills and amounts of time will be needed.

The funding period will be FY 76 through FY 78.

Assumptions

The major assumptions on which the success of this project rests are:

1. That an institution in each of three regions can be found capable of collaborating on the project and willing to bear the overhead costs of the project;
2. That trainees from high levels in health ministeries will be willing and able to attend the courses;
3. That the training received will contribute to better health sector management.

Related Activities

The Pan-American Health Organization has been active in this area. It has considerable experience in health management training and the proposed curriculum will be developed in close coordination with it.

Alternatives

One alternative for training health managers is to bring LDC personnel to the US for training. There are no courses in US universities, however, which are designed to deal with health conditions in LDCs. A second alternative is to develop a health management course for each country. This was rejected, however, because it would be too costly and there are not enough specialists and qualified training institutions to develop such an extensive program. The present method was chosen as a preferred means of developing a training program which is tailored to the needs of the LDCs and can reach a large number of countries at a reasonably low cost.

Beneficiaries

The direct beneficiaries of the management training curriculum will be those high ranking administrators who receive the training, and the collaborating regional institutions whose overall quality will be enhanced. The indirect beneficiaries will be the population which profits by the improved management of the LDC health agencies and also those LDC institutions which adapt the curriculum to their local conditions and initiate their own training programs.

Spread Effects

At the end of the project there will be health management curricula in operation in three regional institutions. These institution will continue to train administrators and as the courses prove successful, they will be further adapted by local institutions.

Financial Requirements and Plans

The estimated cost of this project is about $273,500 of which $84,000 will be expended in the first year for the Latin American portion of the project. It is expected that the contract will be with the Getulio Vargas Foundation. The budget breakdown is as follows:

Category	FY 76 Amount ($000)	MM	All other FY Amount ($000)	MM
Curriculum Development				
Personal Services	18	6	45	15
Travel & Per Diem	10		28	
Workshop	15		30	
Testing and Evaluation				
Personal Services	10.5	3.5	22.5	7.5
Travel & Per Diem	5.5		14	
Reproduction, Translation	10	2.0	20	4
Utilization Workshop	15	.5	30	1
	84.0	12.0	189.5	27.5

TOTAL - $273,500

To reduce funding for the project, the cooperating institutions will be expected to find separate financing for the students and for the training program. This project will fund only the initial development costs of the training materials.

Development of the Project

This project was recommended to TA/DA by Mr. William Worcester and Dr. Joe Davis of TA/H. It was then pursued by an AID consultant who has determined through discussions with Miguel Segovia, chief of PAHO's Health Administration Unit, and by the results of AID's own health sector analysis that there is a widespread need for such a training program. Dr. John Daly, HEW Sector Analysis, reviewed the project and his comments have been incorporated into the design.

The feasibility of this approach has been partly substantiated by the fact that the Getulio Vargas Foundation in Brazil has already installed a similar course in the health field. Their experience will be reviewed to determine how much additional management training should be and/or can be incorporated into their program. It will also be useful to consult the US experts in the field (Harvard, North Carolina, and Johns Hopkins) to determine the state-of-the-art in the US and to ascertain what portion might be suitable for the LDCs. It is estimated that two additional man-months of consultant's time will be needed to conduct these analyses required for preparation of the PP. Furthermore, before the program can be extended to Asia and Africa a feasibility reviews for those regions must be conducted.

As now planned, the PP will be submitted in FY 76. This is dependent, however, on the TA/DA office receiving a direct hire specialist in this field to prepare the final version of the PP and then manage the project. ///

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ ~~Grantee~~
Office of Health

2. Document #1 -- PID
Status: New ☐ Revision # _____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
2/15/76

3. Project Number

4. Bureau: TAB Code: 6

5. Project Title
A. Health Impact of Non-Health Sector Projects
B

6. Estimated Initial/Final Obligation
FY 77 FY 77

7. Estimated Cost (Life of Project)
($000 or equivalent, $1 = _____)
AID Approp. 200
Other U.S. _____
Total U.S. _____
Host Govt. _____
Other Donor(s) _____
Total _____

8. Purpose Code
Category Code _____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			$200.00			
Total			$200.00			

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal
To improve the official allocation and ~~equivalent~~ equitable distribution of LDC health sector resources to improve the health status of LDC population.

13. Project Purpose(s)
This project proposes to increase the state of knowledge concerning the relationships between the health sector and other development sectors. The project purpose is highly relevant due to the fact that health, an important indicator of social welfare, varies quite sensitively to changes in other sectors. In fact, health improvement is perhaps more profoundly influenced by changes in other sectors than in the health sector. This project seeks to elucidate some of these relationships in order to improve multisectoral planning.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: _____
Title & Date: _____

Date Received in AID/W or for AID/W Documents; date of Distribution: _____

1/12

I. Summary of the Problem to be Addressed and the Proposed Responses to the Problems

A. Narrative

Health is a social good produced and influenced by activities in many sectors as well as the health sector. Several research findings have indicated that changes in other sectors may produce marked or rapid changes in health status. This project proposes to improve knowledge concerning some of these intersectoral relationships. It is expected that the project development work which goes into this project will result in the identification of a range of project possibilities.

B. Research Purpose and Expected Products

The research purposes to expand the store of available knowledge concerning the relationships of the health sector and other sectors. Specifically, the impact of large development projects of several types on health status will be studied. The expected product is new information useful in the planning of developmental projects in order to optimize their effect on health status of impacted populations.

C. Significance and Rationale for the Research

Health is currently recognized as an important indicator of development. It is also commonly recognized that health is produced and influenced not only by health programs, but also by activities in other sectors. In fact, it

is certainly the case that in many instances projects in other sectors may more efficiently produce health changes than would similar investments in health sector programs. Also, many times adverse health changes due to project activities in other sectors can be more efficiently prevented by project modification than corrected after the fact.

Some work has been done in this area. The U.N. Research Institute in Social Development, the Pan American Health Organization, and individual researchers have done preliminary work that indicates that health status correlates to many other indicators of quality of life. Many case studies have reconfirmed the drastic impacts that some developmental projects have had on health of populations affected. Of particular importance has been the impact on the environment and on the spread of water-borne diseases by water impoundments.

D. Plans to Coordinate to Link Research-Industry Network

During the development of the project, contacts will be established with the U.N. Researach Institute for Social Development, and the PAHO Center for Ecology and Health, to link research efforts and establish networks.

E. Plans to Facilitate Utilization of Research Results

This is a research project and as such is expected to have great dissemination of results. It is expected that the

results will be generalizable to the extent they will be equally useful to the planning process of all LDCs. Dissemination will take place through (1) AID distribution, (2) journals and (3) conferences.

F. Management Considerations

The principle management considerations are those involved in the selection of LDC contractors and the working out of collaborative arraghements to maximize the benefits of this project in terms of both quality of the information developed and the development of LDC institutions to carry out this type of research.

II. Financial Requirements and Plans

The total amount of resources required to research the most important aspects of this problem cannot be accurately estimated at this time. It is proposed that $250,000.00 be allocated for initiating research in this area in February 1977.

III. Development of the Project

During the first quarter of FY February 1976 the project monitor will convene a meeting of three to four experts to advise AID on research priorities in the area of impact of development projects on health. Subsequently AID Regional Bureau, USAIDs and other organizations will be contracted to identify research opportunities. Site visits will be undertaken in second and third quarters of February 1976. During the first three quarters of project development contacts will be established

to facilitate research linkages and network development.

Schedule for project completion:

submit P.P. March 15, 1976

initiate activity October, 1976

It is estimated that 25% of the time of the project monitors time will be required during the first three quarters of 1976 to develop this project.

IV. Issues of a Policy or Programmatic nature

A small research project will be undertaken in early FY 76 to identify appropriate research focus and analytic research methods in order to develop a technically adequate research strategy in this area.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 931-11-590-004

Project Title Resources Support Services Agreement with the National Library of Medicine (NLM)

Contractor a) Department of Health, Education and Welfare/NIH/NLM

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Reference services of the National Library of Medicine a) Interlibrary Loans b) Reference Searches c) Index Medicus Subscriptions	1. In calendar year 1974 NLM provided to AID recipient countries 19,664 interlibrary loans (supplying extracts from medical publications on request) and 672 reference searches (furnishing citations on various medical/health subjects). In addition in FY 1975 NLM sent out copies of its Index Medicus (periodic bibliography) to 34 subscribers in AID-supported countries plus to 28 subscribers for Abridged Index Medicus.

II. Project on Schedule; Life-of-Project Budget Accurate?

The services rendered under this project have been made available to LDCs through AID support since 1969. Statistics show a slight increase in demand for services available through NLM. Interlibrary loans increased from approximately 17,000 in 1973 to 19,664 in 1974. Audio visual loans for films available through the Library have not been

III. Significant Change(s) in Project Proposed?

No significant change in the scope of services rendered by the NLM are contemplated. A PP will be prepared prior to funding approval in FY 1976.

IV. Role of TA Technical Office; Mondays required

TA/H conducts a PAR Review annually and completed the necessary program documentation for annual funding of this technical support activity. It is estimated that a total of 6 man days annually are devoted to the project by TA/H.

Attachment: PAR dated 7/1/75

Attachment: PAR dated _____

I. Implementation Progress (Cont'd)

Progress to date & Relationship to Project Purpose and Goal

The project continues to fulfill its goal of providing medical scientific information to LDC medical schools, hospitals, medical researchers, ministries of health, clinics, and individual physicians.

It is estimated about 20% of services are for family planning activities which are separately funded through PHA/POP.

II. (Cont'd)

utilized by the host countries nor AID missions.

It is expected that the level of services provided by the NLM will remain constant.

AID 1050-25 (10-70)

REPORT U-446

PROJECT APPRAISAL REPORT (PAR)

PAGE 1

1. PROJECT NO.	2. PAR FOR PERIOD:	3. COUNTRY	4. PAR SERIAL NO.
931-11-999-004-72	May 1, 1974 TO April 30,75	Worldwide	

5. PROJECT TITLE

OIH/RSSA

7. [illegible]	8. DATE LATEST PIP	9. DATE PRIOR PAR
Is indefinite	N/A	None

10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: $	b. Current FY Estimated Budget: $	c. Estimated Budget To Completion After Current FY: $

11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)

a. NAME	b. CONTRACT, PASA OR VOL. AG. NO.
Department of Health, Education and Welfare Office of International Health	

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X) USAID	A. ACTION (X) HOST	B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
X		Transfer Dr. Smith to MEDEX RSSA	
X		Query bureaus for FY 1976 requirements	
X		Review country health profile content and publication requirements	
X		Examine the need for provision of funds to OIH for consultant time in excess of planned manpower levels to be utilized as needed.	

D. PROJECT PLANNING REQUIRED

REVISED OR NEW: ☐ PROP ☐ PIP ☐ PRO AG ☐ PIO/T ☐ PIO/C ☐ PIO/P

E. DATE OF MISSION REVIEW

PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE

R. Don Newman

MISSION DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE

Lee M. Howard, MD

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PROJECT APPRAISAL REPORT (PAR)

PURPOSE:

To provide AID with professional health resources to support AID/W, Regional Bureaus and USAIDs to provide for health development activities in response to the Congressional mandate.

BACKGROUND:

OIH/HEW is organized into two divisions that provide services to AID through this resources agreement. The Division of Planning and Analysis has a staff of fourteen, eleven of whom are AID-funded. This staff provides staff work for Country health profiles. Some of these documents are published as Syncrisis. The balance of the professional staff provides guidance, leadership and technical review of scopes of work and finished products of health sector analysis and participate in these programs to the extent time is available. Near the end of FY 1975 funds were provided to increase the manpower of this latter professional group by five professionals to increase the ability of OIH to cope with greatly expanded Regional Bureau requirements for health sector assessment over the next year or two.

The Division of Development and Coordination has a staff of twenty-three, nine funded by AID, six through this resources agreement. These staff members provide resources for coordination of international health programs, development of policy and other guidance as a staff resource to AID, an information resource for international health activities and responds to special requests of AID for personnel for short-term assignments.

In addition, AID supports administrative backstopping within OIH which includes the services of an Administrative Assistant, Office Service Supervisor, Accounting Technician and one secretary. These services appear to be adequate and reasonable.

REVIEW PANEL MEMBERS:

John Welty, PPC

Maura Brackett, LA/DR

Dr. Ed Cross, Africa Bureau

Sue Gibson, NESA/TECH

R. Don Newman, TA/H

Discussions were held with these panel members, the Director of OIH and his staff, and other representatives of TA/H on April 30,1975. A list of actions are included on the face sheet of th is PAR.

GENERAL CONCLUSIONS:

Agency representative agrees that it is necessary to continue a resources agreement with OIH for professional consultation. It may be useful and helpful to the Regional Bureaus to provide funds for undefined short term consultants through the RSSA agreement who could be named as situations arise.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 931-11-540-035

Project Title Training LDC Health Planners

Contractor a) University of Michigan Contract #AID/ta-C-1101

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. A curriculum to incorporate training in the appropriate mix of disciplines to function on the interface of health planning and national planning. 2. Trained LDC personnel. 3. The identification of LDC institutions with potential capability to provide instruction in the proposed curriculum.	Project was not funded until last day of FY 74; therefore first class of students expected in September 1975. New courses have been developed and existing courses tailored to needs of LDC trainees.

II. Project on Schedule; Life-of-Project Budget Accurate?

Budget was originally designed with idea that development costs would be higher for first 2-3 years, then course supported by expanded tuition and project would fund just field follow-up in last 3 years. Under new OIT regulations it appears costs for each of the 5 years will be approx. $125,000 to support some core costs and field follow-up.

III. Significant Change(s) in Project Proposed?

None

IV. Role of TA Technical Office; Mondays required

This is a centrally funded and managed project. One to two trips to Ann Arbor per year plus field correspondence with USAIDs regarding course and participants.

Attachment: PAR dated June - 25, 1975

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Outputs

1. Design and prepare a curriculum and present a graduate level course incorporating an appropriate mix of disciplines to incorporate health planning into national economic planning at appropriate levels.

2. Provide integrating courses in health planning and social/economic development in order to present a full year course for twenty developing country participants per year.

3. Develop new courses and tailor existing courses to the needs of planners from developing countries which will link health planning and economic development.

4. Develop planning skills for effective functioning of the interface between macro and micro health planning in a developing country setting.

5. Perform field follow-up of graduates from the course in their home setting and evaluate their training as it relates to their real planning problems.

6. Assist graduates, during field follow-ups, with current health planning problems.

7. Establish linkages with institutions in developing countries to encourage presentation of a similar curriculum by the institutions.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project #931-11-999-004-72

Project Title OIH/RSSA

Contractor a) HEW/OIH

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
Prepare syncrisis studies and briefing documents. Provide consultation to Regional Bureaus, USAIDs & LDCs on national health planning and sector analysis. Develop guidelines for sector analysis. Assist in the preparation of DAPs and other field program documentation and perform special studies and analysis for the preparation of project documentation. Assist the Office of Health, TAB with the coordination of health activities with other international organisation and bilateral donors.	During FY 1975 11 syncrisis studies were completed and technical assistance was provided for five sector assessments. OIH participated in two project planning activities and the preparation of six DAPs. One health policy statement was developed, one cost benefit analysis and 2 project evaluations. In addition, the staff provided under this resources agreement were responsible for recruitment of approximately 200 man months of health planning consultations.

II. Project on Schedule; Life-of-Project Budget Accurate?

During FY 1975 adequate man months of time were not available to respond to all health sector assessment and planning activities. A contract for five additional personnel has been negotiated. It is anticipated that this level of support will be adequate to Agency needs over the next two years.

III. Significant Change(s) in Project Proposed?

No significant change indicated.

IV. Role of TA Technical Office: Mandays required

Man days required for project management

Newman	30
Worcester	30
Florio	15
	75 man days

Attachment: PAR dated 7/1/75

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project #931-17-590-73 PROAG #8 (40107)

Project Title Cost effectiveness of alternative health measures

Contractor a) Fondo Nacional de Proyectos de Desarrollo (FONADE)

b) National Planning Dept. of Government of Colombia

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1) Information on the effectiveness of alternative health sector interventions on health status. 2) Information on the impact of environmental and economic factors on health status. 3) Identification of the key indicators of health status most useful for the analysis of program strategies in LDCs.	Health Sector Analysis moving along now. At time of approval of research project major change in GOC delayed appointment of project manager. Delay has probably been beneficial because after the political candidates had been placed, a qualified person was appointed to head up operation. See attached report to RAC

II. Project on Schedule; Life-of-Project Budget Accurate?

Budget projection still appears reasonable however due to circumstances noted under progress, final reports may be delayed as much as 12 months.

III. Significant Change(s) in Project Proposed?

none

IV. Role of TA Technical Office; Mondays required

Project monitoring in collaboration with LA/DR and AID/C, since this is a joint research and health sector assessment. Selection and coordination of U.S. consultants and staff to comply with RAC stipulation for U.S. collaboration in design, methodology and operations. Approximately 25 man days per year required for project monitoring and evaluation.

Attachment: PAR dated _____

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3/20/75

Progress Report to RAC on Cost Effectiveness of Alternative Health Measures Research Project

Following RAC approval of this project in May a project agreement was entered into with the National Planning Office, Government of Colombia on June 30, 1974.

In order to be responsive to RAC suggestions the project agreement was approved earmarking AID research funds to be used for data collection and analysis and payment for provision of consultants and providing for a collaborative relationship by an advisory group.

An advisory group has been constituted consisting of AID and HEW personnel. This group is Mr. Paul Ahmed, economist, Office of International Health, HEW. Dr. Thomas Hyslop, physician, AID Colombia, Mr. Russell Misheloff, economist, AID/Washington and Mr. James Rearden, economist, AID Colombia. All these individuals spend at least 25 percent of their time on technical assistance, collaborative activities and monitoring of the project. In addition to these individuals, Dr. Joe Davis, health planner, OIH, rounds out the advisory group.

Additional techical assistance has been provided by personnel from the Bureau of Census on the following aspects:

Floyd O'Quinn and Barbara Naeseth, (Bureau of Census) Design of samples for surveys of hospitals, health centers, health posts and private doctors offices (definition of universe, sample size, stratification, sample selection).

In addition to the above named individuals, Dr. Joseph Davis and Paul Ahmed of HEW have from time to time identified individuals to help out with specific problems. These have included Garee Lossee (NCHS), John Daley (HEW), Karen Lashman (HEW), Philip Lawrence (NCHS) and Charles Berry (University of California at San Diego).

One of the normal hazards of working in LDCs is lack of continuity in governments. This factor has delayed the Colombia research project following the change over in government. Some key personnel were promoted to other assignments. The delay in replacement will prove beneficial to the project in that qualified personnel are being appointed rather than purely political appointees.

The conceptualization of research and the modeling instruments have been reviewed by the Colombians and the advisory group who feel that the goals of the research project will be met.

To date questionnaires have been prepared for the three surveys programmed. The morbidity sampling frame is essentially complete and enumerators for data collection are being prepared.

The first annual evaluation is scheduled for this summer.

In the original report we presented plans for entering into a university contract. These plans are now impossible due to a severe reduction in available funds.

We continue to concur in and wish to pursue RAC's suggestion that AID needs an institutional base to provide professional expertise on a collaborative basis in the conceptualization, design and management of LDC research projects. The base will provide for continuity for building on previous research experience and for use of successful methodologies for further projects which is frequently lost using advisory groups constituted for each project.

With the possibility of obtaining FY 76 funding for such an institutional base we would appreciate any further guidance from RAC as to how such an institutional base should be identified and developed and whether there are additional functions which should be considered.

3/20/75

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 931-11-570-101

Project Title 211d Grant - Utilization of University capacity: Health Planning & Low Cost Delivery Systems

Contractor a) Johns Hopkins University

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Education and Training 2. Research 3. Technical Advisory Services 4. Information collection and Dissemination 5. Institutional Linkages	This grant, revised March 1975, will focus JHU activities on AID/LDC needs in the five output areas as they relate to Health Planning and Low Cost Delivery Systems. Specific funding is provided to provide released time for senior faculty to perform technical advisory services in response to Regional Bureau requests.

II. Project on Schedule; Life-of-Project Budget Accurate?

Yes

III. Significant Change(s) in Project Proposed?

Revised on 3/28/75.

IV. Role of TA Technical Office; Mondays required

This is a centrally funded and managed project. Coordination of requests for services, development of a research strategy with JHU faculty and Regional Bureau technical offices, and site visits. Field project review will be required in FY 76 to determine needs for continued funding to respond to AID/LDC needs.

Attachment: PAR dated 12/6/74

CSW 1737

REPORT U-4.

PROJECT APPRAISAL REPORT (PAR)

PAGE 1

1. PROJECT NO	2. PAR FOR PERIOD	3. COUNTRY	4. PAR SERIAL NO.
PIO/T 931-11-570-101	6/30/73 TO 10/25/74	USA	

5. PROJECT TITLE

Institutional Development in Health and Population

6. PROJECT DURATION: Began FY 7/1/68 Ends FY 2/28/75	7. DATE LATEST PROP	8. DATE LATEST PIP	9. DATE PRIOR PAR
			Jan. 8, 1974

10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: $1,800,000	b. Current FY Estimated Budget: $150,000 (8 mos.)	c. Estimated Budget to completion After Current FY: $ 520,000

11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)

a. NAME	b. CONTRACT, PASA OR VOL. AG. NO.
Johns Hopkins University, School of Public Health	csd-1939
Department of International Health	

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X) USAID	A. ACTION (X) AID/W	A. ACTION (X) HOST	B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
	TA/H		It is recommended that the current 211(d) Institutional Development Grant (csd 1939) be extended in the utilization mode for a period of two years subject to the following qualifications: 1. The university should continue to seek other external sources of funding for its international program in DIH with the aims of reducing its unhealthy dependence on AID for so large a proportion of its support. 2. The principal activity financed by the grant should focus on the areas of AID priority, i.e., health planning and low cost delivery systems. These priorities should be reflected in DIH training and curriculum, research strategy, and in faculty competence to give technical advisory service to LDCs. 3. DIH should develop jointly with TA/H and AID's Regional Bureaus a research strategy and program designed to respond to LDCs and AID's priority requirements. To this end, an informal committee for research strategy and priorities should be established with members from both AID and Johns Hopkins and perhaps with the addition of representatives of WHO, PAHO and other major international groups. 4. Priority should be given to using grant funds to increase institutional response capability for technical advisory services in the field. This means more interdepartmental involvement of economists, social scientists and physicians in direct assistance to LDC's. Provision should be made with grant funds for more release time for DIH staff to be involved in response to LDC and AID requests. (continued on page 1A)	Dec. 1974

D. REPLANNING MILESTONES REVISED OR NEW	E. DATE OF MISSION REVIEW
[X] PROP [ ] PIP [ ] PRO AG [X] PIO/T [ ] P O/C [ ] PIO/P	24-25 Oct. 1974

PROJECT MANAGER: TYPED NAME, SIGNATURE, INITIALS AND DATE	MISSION DIRECTOR: TYPED NAME, SIGNATURE, INITIALS AND DATE
William E. Worcester, Jr. 12/6/74	Office Lee M. Howard 129

Continued from Page 1:

5. The university should continue and intensify its collection of information, data and documents within the range of its interests and country orientation. Efforts should be made to broaden the dissemination of Johns Hopkins publications data and country information to a larger clientele, especially the data available on AID KPAs.

6. DIH should continue to establish and strengthen LDC linkages with a view to facilitating and encouraging the establishment of strong national institutions for training, planning, research and demonstrations in health planning and low cost health delivery systems.

7. Grant support should be provided for other utilization activities including but not limited to the following:

   - The conduct of at least two training projects per year in LDCs to train planners in techniques and methodologies of health planning and planning low cost health delivery systems.

   - The holding of periodic meetings (two to four) each year with linkage institutions either in the LDCs or in the U.S.

   - The revising and updating of the DIH health planning manual and its distribution to LDC and other institutions as widely as possible.

   - Devote more time and resources to studies of effect of the economic development on health, and to cost effectiveness studies of alternative health measures.

   - Relate the overseas field requirements for graduate students and international health residents to ongoing AID planning and low cost delivery programs in LDCs.

OPTIONAL FORM NO. 10
JULY 1973 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

TO : Dr. Lee M. Howard, TA/H

DATE: January 13, 1975

Dr. James Banta, TA/H James E Banta

FROM : William E. Worcester, Jr., TA/H

SUBJECT: Analysis of 211(d) Team Report on Johns Hopkins University, DIH

The review of the Johns Hopkins 211(d) represented the inputs of the TAB Grants Coordinator, TA/H, representatives of both technical and program offices of regional bureaus and an outside expert. The team concluded that in spite of the lack of specificity in the original grant, the performance of DIH both quantitatively and qualitatively made an important contribution to AID and the LDCs in support of AID priorities in international health.

The team recommended that the 211(d) grant to JHU be extended as a utilization grant focussed on health planning and low cost delivery systems with certain constructive qualifications. The new grant should focus on strengthening and utilization of response capabilities in: (1) training and education, (2) research, (3) technical advisory services, (4) collection and dissemination of data, (5) institutional linkages. The team further recommended that these outputs be directed toward a redefined focus which emphasizes health planning (particularly micro-planning) and systems for low cost delivery of health services.

In addition to the recommendation that the grant be extended in a utilization phase, the team specified several specific requirements that should be incorporated in the new grant as follows:

1. The university should continue to seek other external sources of funding for its international program in DIH with the aims of reducing its unhealthy dependence on AID for so large a proportion of its support.

2. The principal activity financed by the grant should focus on the areas of AID priority, i.e., health planning and low cost delivery systems. These priorities should be reflected in DIH training and curriculum, research strategy, and in faculty competence to give technical advisory service to LDCs.

3. DIH should develop jointly with TA/H and AID's regional bureaus a research strategy and program designed to respond to LDCs and AID's priority requirements.

5010-110

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan

4. Priority should be given to using grant funds to increase institutional response capability for technical advisory services in the field. This means more interdepartmental involvement of economists, social scientists and physicians in direct assistance to LDC's. Provision should be made with grant funds for more release time for DIH staff to be involved in response to LDC and AID requests.

5. The university should continue and intensify its collection of information, data and documents within the range of its interests and country orientation. Efforts should be made to broaden the dissemination of Johns Hopkins publications data and country information to a larger clientele, especially the data available on AID KPA's.

6. DIH should continue to establish and strengthen LDC linkages with a view to facilitating and encouraging the establishment of strong national institutions for training, planning, research and demonstrations in health planning and low cost health delivery systems.

7. Grant support should be provided for other utilization activities including but not limited to the following:

   - The conduct of at least two training projects per year in LDC's to train planners in techniques and methodologies of health planning and planning low cost health delivery systems.

   - The holding of periodic meetings (two to four) each year with linkage institutions either in the LDC's or in the U.S.

   - The revising and updating of the DIH health planning manual and its distribution to LDC and other institutions as widely as possible.

   - Devote more time and resources to studies of effect of the economic development on health, and to cost effectiveness studies of alternative health measures.

   - Relate the overseas field requirements for graduate students and international health residents to ongoing AID planning and low cost delivery programs in LDCs.

The Office of Health generally concurs in the Evaluation Team's conclusions and recommendations. TA/H in reviewing the report agrees with the team that the core staff capabilities of DIH have developed substantially in teaching, research, and advisory capacities and that the Department has reached a level of development which assures adequate

response to demands for services from AID, LDCs and international organizations. TA/H strongly urges that the resource of DIH be utilized in the future in the areas of health planning and low cost delivery systems and that the grant be extended.

With respect to the team's insistence on the University's seeking other external funding, we are in full agreement, but we are also aware of the increasing efforts of Johns Hopkins University to obtain assistance from other sources and the difficulty under present economic conditions and curtailment of contributions from government and foundations to obtain new commitments. The same condition applies to additional support from the University.

We are also in accord with the team's recommendation that more release time be provided for DIH faculty so that it can respond to requests for overseas technical advisory services. We expect a substantial increase of demand for such services.

TA/H is very much aware of the increasing focus of DIH in the areas of AID priorities and supports the team's conclusions that there has been a coincidence of interest of DIH and TA/H in health planning and low cost delivery system emphasis. We have received the same conclusion from the AID regional bureaus which have utilized the services of DIH, particularly in health planning.

In any extension of the grant TA/H will urge participation of AID regional bureaus and TAB with Johns Hopkins in developing a research strategy that will accommodate AID, LDCs and Johns Hopkins needs. Prior to the past year such joint considerations were informal. We endorse the idea of the Evaluation Team that an informal committee be established to consider research strategy.

We strongly endorse the team's recommendation for increased attention by DIH to economic studies on the effect of health on development and on cost effectiveness studies of alternative health measures.

In converting the present grant to a utilization phase, we feel that the linkage already established by Johns Hopkins with overseas ministries and institutions will serve to provide AID and the LDCs with training and demonstration facilities to carry out programs in health planning and low cost delivery systems.

We recommend that you approve the attached PAR face sheet so that we may proceed to process a grant request.

Attachment a/s

OPTIONAL FORM NO. 10
JULY 1973 EDITION
GSA FPMR 141 CFR 101-11.6

UNITED STATES GOVERNMENT

Memorandum

TO : Dr. Lee M. Howard, TA/H **DATE:** Jaunary 6, 1975

FROM : Raymond E. Kitchell, AA/TA RK
Chairman, Comprehensive Review Team

SUBJECT: Review and Site Visit of Johns Hopkins School of Hygiene, Department of International Health, October 24 and 25, 1974.

BACKGROUND

A two-day review of the 211(d) grant made to Johns Hopkins Department of International Health (School of Hygiene and Public Health) was made by an AID team on October 24 at Baltimore, Maryland and on October 25 in Washington. The team consisted of Raymond Kitchell, Chairman, AA/TA; Dr. James Banta, Deputy Director, TA/H; Dr. Edward Cross, AFR/DS; Ms. Maura Brackett, LA/DR; William Binford, LA/DP; and Dr. Donald Pitcairn, Fogerty International Center, NIH; William E. Worcester, Jr., TA/H, served as Executive Secretary to the team. Representing Johns Hopkins were: Ray Selzer, Associate Dean of the School of Hygiene and Public Health; Dr. Russ Morgan, Vice-President; Dr. Carl Taylor, Chairman of Department of International Health; and Professors T. Baker, W. Reinke, Parker, Sarma, Newman, Dr. Sorkin, economist, and other faculty members.

The session began with a greeting to the team members by Dr. Taylor on behalf of Dr. Hume, Dean of the School of Hygiene and Public Health, who was unable to be present. Dr. Taylor expressed his appreciation and stressed the paramount role that the AID 211(d) grant had played in the development of the Division of International Health. He then introduced Dr. Russ Morgan, Vice President for Health Sciences and Public Health.

Dr. Morgan prefaced his remarks by emphasizing the dedication and interest of the University in international health. He pointed out, however, that international health was highly dependent on outside assistance. In explaining the proportion of University contribution to external contribution in the Department of International Health, he quoted the figures of 14 to 15 percent from the University and 85% from external sources, primarily U.S. government and state government, but including other contributions from fees, gifts and tuition. He described the DIH income in terms of $60-70 thousand dollars of "hard money" (university endowments, overhead, etc.) and the rest from other contributors, primarily from AID. (See Attachment A.)

Mr. Morgan then made the statement that if no contribution was forthcoming from AID, Johns Hopkins would try to keep the Division of International Health going from foundation and university endowment funds for an interim period until other contributors could be found. He explained that DIH had a number of cross appointments with other schools of the University, but that the Division of International Health represents the focal point of overseas effort.

Dr. Banta (AID) then briefly reviewed the AID emphasis on the three key problem areas of health planning, low cost health delivery systems and environmental health. He pointed out that these problem areas coincided with the emphasis of Johns Hopkins and that the Division of International Health was depended upon to provide a resource backstop in the first two of these KPAs.

The history of the current 211(d) institutional grant was then discussed, principally by Dr. Taylor. The original grant was made in CY-1968 to cover the period from July 1, 1968 to June 30, 1973 and was then extended to June 30, 1974 without additional funding. The amount of the grant was $1,800,000. In June 1974 an additional $150,000 was added to the grant which, with the carryover from the original grant, extended the operation of the DIH through February 1975. The basis for making the 211(d) grant was in response to the AID's need for enhancing institutional capacity in health and population. The purpose of the grant in 1968 was stated as follows:

1. To strengthen education competence in the University by expanding its teaching capacity and curriculum in international health, population dynamics and family planning as related to the needs of LDCs.

2. To strengthen the research capability in those fields as an integral part of the institutional grant program.

Dr. Taylor pointed out that while 2/3 of the grant came from Title X funds, the actual curriculum and faculty were involved in programs which were identified as 25% health, 25% population and 50% mixed, or programs that both in curriculum and research supported both health and population.

Dr. Taylor also recited the earlier history of the Department of International Health (prior to the 211(d) grant). He stated that the Department of International Health was started in 1961 in response to a request from AID. Both AID and WHO expressed the need for an academic base to provide backup for international health programs. As a result

of this demand the Department evolved as the only U.S. university department entirely devoted to international health. The 211(d) grant was thus built on a base that needed greater faculty strength and more systematic and formal institutional relationships.

Parallel to the DIH, a Division of Population Dynamics was started in 1965 in the Department of Maternal and Child Health of the School of Hygiene. This Division became a separate department in 1971.

In addition to these two departments, funding from the 211(d) has been used in support of the Department of Biostatistics, Behavioral Sciences and Gynecology and Obstretics.

At the initiation of the grant in 1968, the support of the faculty of DIH provided for four full time equivalent man years. By the fifth year of the grant, 7.7 man years were provided for approximately fifteen people involved in teaching, research and technical advisory service.

Since 1970, AID has funneled its Title X funds through the University Population Center by means of a University Services Agreement. As a consequence there has been a significant shifting of AID population funds within the University and the largest proportion now goes to the Department of Population Dynamics. This, together with a progressive decrease of Ford Foundation and NEW support, and larger grants to the Department of Obstretics and Gynecology, sharply reduces the funds available for core support of population and health activities in DIH.

Following Dr. Taylor's outline of the history of the Division of International Health and the 211(d) grant, there was general discussion of the progress and limitations under the grant. The interdepartmental contributions of faculty and resources were discussed and the shift of emphasis of the 1968 original activities to stress low cost delivery systems (planning was already a prime objective of DIH) was pointed out by Dr. Taylor as having become one of the most important themes of the teaching and research strategy as a result of AID's emphasis. Dr. Taylor further mentioned the number of students moving into leadership roles in LDCs and in such programs as MEDEX, UCLA-Banfa Program, and leadership in AID country programs.

DISCUSSION OF ISSUES

Issue No. 1 - Achievement of Grant Purpose

This issue was posed in terms of qualitative and quantitative increase in the institutional capability of Johns Hopkins during the years of the grant; the number of participants among MPH candidates, the competence of the Department in research areas, number of research projects, and interdisciplinary resources devoted to programs in training-research.

Dr. Taylor pointed out the results of the grant in terms of staff capability and size; 4 man years to 7.7 man years at present and the number of participating professors from 7 to 15 by 1973. Another evidence of the achievement of competence in the field of international health during the period of the grant was its recognition by the professional community evidenced by awards in international health by APHA, the bestowing on DIH of the Ryan Prize and the Goldberger Award.

To a question of the application of some of the techniques and planning methodologies used overseas to the U.S. ghettos and rural areas, Dr. Taylor was doubtful whether there was direct application. Dr. Baker stressed the point that DIH fosters programs of international health throughout the University. Interdepartmental appointments involving Arts and Sciences, the Medical School, the School of Health Services and the School of International Studies are frequently made. In a written reply to a question on this issue as to the relation of teaching staff to AID's areas of specialization, i.e. health planning and low cost health delivery systems, Johns Hopkins replied that approximately 2.7 man years were engaged in health planning activities and 1.5 in low cost delivery systems. The remainder of the time was 3.0 devoted to other health areas.

Dr. Taylor stated he shares the concern of AID that DIH is overly dependent on continuing government support. He pointed out that tenure does indicate some University commitment and four members of DIH staff are tenured; but if funding is lacking, he was of the opinion that the tenured faculty would leave the DIH to go to other areas which did have funds.

In response to a question of how research and teaching are identified as separately funded under the 211(d), Dr. Taylor stated that training included research as well as supervision of overseas training and research by graduates. He called this type of training "one to one" training. Teaching is constantly being evaluated, and curriculum development is a continuous dynamic process. Much of the time spent by the faculty is in assisting graduate residents in research project design, health project planning, follow-up and evaluation.

In terms of present education and training <u>capacity</u>, Dr. Taylor gave the following breakdown:

1. Doctoral Candidates - av. 8 DPH, DSC and Ph.D. per year.
2. International Health Residents - 4 per year.
   (DIH offers international health residencies to MDs which include two years of experience in preventive medicine and public health under field supervision after their MPH academic work.)
3. MPH - 20 per year.

4. Senior Health Planners - 20 to 25 per year for a two-month course and 15 per year for the four-month course. DIH also gives non-academic long term training to nationals in LDCs in the field, and finally the Department gives an average of two short courses per year in various parts of the world.

The team then expressed its concern with what appeared a lack of a research strategy. Various members queried Johns Hopkins about how research was related to AID priorities. Dr. Banta expressed the observation that there has not been prior consultation between AID and Johns Hopkins on research strategy. In reply Dr. Taylor acknowledged that there has not been sufficient pre-consultation on research, but pointed out that the areas of health planning and the development of low cost delivery systems were defined as two major emphases in research in the mid 1960's and in frequent consultation with Dr. Howard they were accepted as the first two of TA/H's three KPA's in 1970. Numerous research activities are being developed relating to specific sub-sections of those problem areas. In the area of Health Planning, Johns Hopkins has devised a unique method of microplanning (functional analysis) at the local level and continues developing and utilizing research results stemming from that project. Other areas for research have been manpower planning and sector analysis, both of which can be used for low cost delivery systems. Further questions elicited the reply that specific research projects are decided upon by group decision rather than under a long term research strategy.

The team felt that JHU should concentrate on longer term research strategy and confer with AID on the focus of research planning. They also expressed the opinion that the time represented for research is primarily for research planning. In response to a request from the Chairman a list of areas where DIH feels it can focus and make a contribution was presented.

TA/H is generally satisfied with the quality and quantity of output of training, research and responsiveness to field requests for advisory services under the grant. TA/H would have liked to have had DIH make more release time available for field advisory services. While early research was random, it is encouraging to note that the recent projects are more focussed on AID KPAs. TA/H concurs with the review team that there is need for more frequent consultation with DIH on research strategy.

(See Attachment B.)

Issue 2 - Response Capability for Health Planning and Health Delivery Advisory Service

The review teams then took up the subject of institutional response capabilities of DIH. At the request of the Chairman, Johns Hopkins furnished a listing of faculty competence - DIH by each member of the staff. (See Attachment C.)

Discussion followed on whether short term consultation could be assured. Dr. Taylor pointed out the constraints of time because of firm commitments in teaching and research. It was then agreed that any new 211(d) should be utilized to provide release time for such requirements. Dr. Taylor then explained some long term involvements of DIH staff in "think tank" activity such as its membership or the advisory board of the APHA and the Council for International Health and consultation with TA/H on KPAs. He felt that a balance should be struck between long range and short range response. It was agreed that the 211(d) request should be reviewed in its utilization mode to provide response services for both types of requests.

Issue 3 - Gaps and Refinements to AID Priorities

In describing this issue, TA/H stated that given the fact that grant objectives were vague and mixed with population, there is concern that current AID priorities had not been sufficiently addressed. One of these areas of insufficiency is the economic aspects of planning. One member of the review group also added the area of social science and motivational studies as not having received sufficient attention. In the general discussion that followed Dr. Taylor conceded that economic aspects of health are not well understood and gave several reasons for this.

Economic aspects of health planning methodology have not, in general, been given the attention they deserve for three principal reasons: (1) health professionals tend to be unfamiliar with the basic concepts of economics while economists are generally unfamiliar with the special features of the health care system which affect economic analysis; (2) the economic interactions of health care, the impact of health itself on economic development, and the contributions of economic development to improved health are not well understood; and (3) no clear agreement has been reached concerning the relative importance of health care as an investment in human capital in contrast to its justification as a desired element of consumption.

Despite that, DIH has done a state of the arts analysis of health and economic development. In addition, the Department has added a health economics to its staff, Dr. Allen Sorkin, who has developed courses in health economics. Some studies in this field undertaken by Johns Hopkins include "An Analysis of Punjao Data Related to Health and Population Variables", and "Productivity of Workers and Health in Cali, Colombia". Johns Hopkins does not feel that health economics is a serious gap. Nevertheless, some members of the team expressed the opinion that health and economic development should be explored further in terms of cost-benefit studies.

Development of Information Materials and Their Dissemination

Questions were raised by the team on the role of Johns Hopkins Department of International Health regarding information collection, analysis and dissemination as a legitimate and important activity of the department. Dr. Taylor mentioned that in the five years period of this grant, the department has published 160 articles in various scientific journals, dealing not only with specific bio-medical topics such as nutrition, but also with various aspects of health planning, health care systems, and training and education in health sciences. Dr. Taylor felt that the principle obligation in an academic department is a generation of information and its dissemination within the limits of its ability. Dr. Taylor viewed the broad scale collection, classification, and storage of information from extra-departmental sources as a highly desirable objective but one which exceeded Johns Hopkins Department of International Health capacity. He considered that it would be more appropriate for a single agency, federal or non-federal, to serve as a clearing house for information retrieval and dissemination relating to international health. There was general agreement by the team with the viewpoint that Johns Hopkins not be a center for general collection of information but that an outside institution which had that as its primary objective should be designated. Possibilities are the World Health Organization or a private organization such as the American Public Health Association or the Council of International Health.

Institutional Linkages

There was general discussion of the development and utilization of institutional linkages and to what extent the Department of International Health, through its faculty exchange and joint projects for research and pilot projects has developed these linkages. In the written reply to these questions earlier raised in the issues paper by TA/H, Johns Hopkins mentioned several linkages that had been established since and before the beginning of the grant. As an example, the Institute for Child Health in Lagos, Nigeria was mentioned. In this institution, an AID supported

national training program offers the opportunity for pioneering work in the use of ancillary health professionals delivering health and family planning services at low cost for the population of Nigeria. Teams are trained in Lagos who then set up satellite training programs in each state. This demonstration is an example for Africa as well as other regions. Also as part of the international work of the Department of International Health, there are linkages with the Institute for Nutritional Research in Lima, Peru. This Institute has been carrying out pioneering work in nutrition for the past ten years. The research findings have important implications for nutritional components of low cost delivery systems. This linkage has developed interest in productivity, and has led to the award of a Goldberger nutrition prize to Dr. George Graham of DIH. A third linkage is with the School of Public Health in Jakarta, Indonesia which will promote the use of low cost health delivery services throughout Indonesia.

There are other linkages where periodic LDC consultation will be maintained with the Department of International Health, for instance the Department of Community Medicine in Shiraz, Iran, the Fomeco in Zaire, the Bangladesh Ministry of Public Health, International Institute for Rural Reconstruction in the Philippines, also the School of Public Health at Seoul National University in Korea and the Institute of Public Health in Vietnam. In effect, Johns Hopkins took issue with the implication that one of the gaps in the total efforts of the Department of International Health is a lack of comprehensive linkages with LDC institutions. The above examples were presented to counteract such a conclusion.

In the discussion that followed, the point was made that people are the key development resource, and development involves an interaction of attitudes and motivation with ways of doing things through linkages with LDC institutions. To be effective in reaching specified goals within a context of positive and acceptable socio-political side effects, there is need for careful and deliberate planning that involves all the interested parties, particularly those in the country. To have operational usefulness, JHU and other interested parties in the U.S. and abroad are enccuraged to disseminate knowledge to support development of operational applications in the field, to encourage additional research and analysis and to support the training of practitioners through linkages.

Coincidence of Interests of KPA's of TA/H and DIH Priorities

As indicated previously, at least two of AID's KPA's, those of health planning and low cost delivery services, have been priority items in the

objectives of DIH. Even prior to 1962, and certainly before the initiation of the 211(d) grant for institutional development, planning was the unique contribution of DIH to international health. Especially through special courses for health planners and senior national planners from various government agencies in the LDCs, this planning course has become well known. The 211(d) grant emphasized this priority, and in 1970, at the time that Dr. Howard, Director of the Office of Health, TAB, proposed health planning as one of the KPA's, extensive conferences were held with Johns Hopkins to develop this key problem area. Since then, the resources and response capability of DIH has been called on frequently to provide technical assistance as well as specialized training for health planners to fulfill the needs of TA/H, the regional bureaus and AID in general as well as LDC's and international organizations. Johns Hopkins pointed out that essentially the Narangwa project in India is a micro planning project; that much that has been learned in the coordination of resources with needs in the villages, and in the local areas in India, is applicable to other low cost local health delivery systems. While "low cost delivery systems" has not been identified as such in the teaching, research, and technical assistance provided by DIH, the titles of the projects, the results of its technical advisory services, and the contents of the curriculum, indicate that low cost delivery programs were a primary output of much of the DIH efforts.

Dr. Banta explained that the Johns Hopkins School of Hygiene and Public Health is part of a larger network of institutions mobilized by TA/H to provide support for the health programs of AID. While Hopkins has been seminal in its influence on international health, several other schools of public health have international health programs - University of Hawaii, Pittsburgh, North Carolina, Michigan, UCLA and Tulane have either programs or divisions. TA/H has the challenge of coordinating and mobilizing the expertise of these academic resources and insuring the kinds of inter-institutional dialogue that is likely to generate solutions to the key problem areas of health. Dr. Banta stated that JHU will be encouraged to consult with its sister institutions concerning low cost integrated health delivery systems and it is anticipated that AID and LDCs will benefit from these coordinated endeavors.

Environmental Health

There was some general discussion on the use of the Division of International Health and Johns Hopkins as a primary resource in environmental health. It was the opinion of the team that there were other sources for obtaining much of the resources and information on international health and the environment. The team discouraged the idea of this 211(d) grant supporting the development of a tropical medicine center as an expansion of their environmental health program. The team recommended that JHU concentrate its efforts on health planning and health delivery systems.

Issue 4 - Rationale for Utilization Grant

In considering extension of the 211(d) in the utilization mode, the team raised several questions about the proposal of Johns Hopkins in moving from emphasis on the development of institutional capabilities to a new phase of primary emphasis - utilization of the resources for response capability. In terms of outputs, the team had certain specific questions and reservations on the areas where the Division of International Health could provide most competence.

Since the purpose of the proposed grant is to maintain and focus the institutional response capacity of Johns Hopkins Department of International Health for active utilization in: training and education, research, advisory services, information collection and dissemination, and the establishment and strengthening of institutional linkages, discussion was held on each of these output capabilities.

INSTITUTIONAL RESPONSE CAPABILITIES

(1) Training and Education

Discussion centered around the point made in the issues paper that the Department of International Health since 1962 had devoted a major part of its resources to training participants for leadership in international health. These participants included candidates for MPH degrees, specialized courses in health planning and delivery of low cost health service systems. The number given by the University as to present output was 12 senior planners and 20 or more MPH candidates majoring in international health. In response to the question as to whether the DIH will be able to maintain this level of training with the new grant, Dr. Taylor stated that three types of degree programs will continue. Candidates for the Doctor of Public Health in International Health will continue at approximately two per year. In addition, there will be fellowships for International Health Residents. An International Health Resident is a doctor serving overseas in an approved residency in Preventive Medicine and Public Health. The doctor may work in an LDC on AID priority programs or on other international programs. Dr. Taylor considered that four to six International Health Residents would be the output in this area per year. The MPH candidates in international health would concentrate on AID priority areas, particularly in health planning. The number of MPH candidates in DIH will continue to be about 20 to 25 per year, of which at least half will be from the LDCs. As for senior health planners, degree candidates and senior officials from the LDC governments will take

the short two-month course or the four-month course. Dr. Taylor estimates 20 to 25 participants will take the two-month course and about 15 will take the four-month. The subject of overseas training courses was discussed by the group and Johns Hopkins agreed to running at least two regional training programs per year overseas. The AID members of the team felt that this would be an excellent use of grant funds as supporting the overseas regional training courses. In a written statement accompanying the reply to the issues paper, the Division of International Health mentioned that they anticipate increased participation in the expanded four-month program. Recent expressions of interest by foreign governments coupled with the prospect for formal institutional linkages suggest that it will be possible to conduct short courses, workshops and seminars for a substantial number of participants in selected countries overseas. Such training programs, which would have the advantage of dealing with country-specific programs might be given as often as twice a year. One of the AID Regional Bureau team members pointed out that there will be a sufficient and continuous demand for training of health planners, both overseas and in the Baltimore site for the next three years.

The AID African Bureau representative expressed the idea that training packages could be developed through DIH planning with regional bureaus to include both training at Johns Hopkins and providing for full follow-up in the LDCs, supported principally by funds other than the 211(d).

(2) Research and Extended Knowledge Base

Research capability of the Division of International Health was extensively addressed by the team. It was agreed that support of faculty for design of research projects and working with LDC leaders in field demonstrations was a basic element of the grant. DIH staff should also be required to prepare findings for dissemination and supervise field work. The specific role of the grant in support of AID priorities in research was described by Dr. Taylor as funding core support for actual research projects, and to provide an institutional backstop and follow-through. Mr. Kitchell pointed out that the 211(d) grant could be used support basic research, exploration, and preparatory phases of more involved research and development activity and that the primary purpose of grant-supported research is to extend the knowledge base and keep the capacity in being and viable. It was emphasized that research planning and development of research strategy requires periodic discussions between DIH, TA/H and the LDCs. In this way, the health priorities of AID will constantly be kept in the forefront of Johns Hopkins research strategy.

In response to the question on how much faculty time will be devoted to research, Dr. Taylor mentioned that about 2/3 of the faculty time under this grant will be devoted to teaching and research. This will represent about five full-time equivalent faculty members per year, 60% of which would be for research. A listing of the expected areas of research which would be in accord with AID/KPA priorities is attached to this report. (See attachment C.)

One of the members of the team expressed the hope that under an extended or utilization grant much of the research resource base will be devoted to the support of studies economic effects of health, and methodologies of micro planning. Johns Hopkins will also make comparative analyses of selected low cost delivery systems projects around the world. DIH expressed interest in implementation of local adaptations for training auxiliary health workers and further research will be done on the use of auxiliary manpower in health delivery systems. As a final point in discussing research utilization, it was suggested by members that DIH take the initiative in setting up an annual meeting involving relevant bureaus of AID to discuss research needs and priorities. Also included in that meeting would be representatives of a selected range of other agencies such as HEW, The World Bank, and the UN.

(3) Advisory Services

In the utilization phase, advisory response capability will be of prime importance to AID and other agencies.. A general discussion was held on the capability of DIH to respond to AID demands in its priority areas. It was recognized that under a 211(d) utilization grant, greater advisory service response capability will have to be built up while still keeping in balance the other responsibilities of the department. Dr. Taylor mentioned that the principles and areas involved in such advisory response capabilities are similar to the research questions because the development of competence tends to follow the lead of research activities. A list of current faculty capabilities which must be interpreted in light of their efforts to focus on health planning and low cost delivery systems is attached and is included as an appendix to this report. (See attachment D.)

In justifying budget support under a 211(d) grant for advisory service output, Dr. Taylor stressed the importance of several types of personnel support needed. First, the actual faculty time that is not paid for directly by the consultation itself. This includes preparation, reporting, and the essential process of maintaining competence in the area through meetings, seminars, readings, and research. It also includes the ability

to make a quick response which may not justify all of the processing costs of getting separate funding for the consultation. For instance, stopping off to visit AID missions or institutions while engaged in other field activities. And very important, there is the element of release time - the necessity to have sufficient depth of faculty so that there are individuals who can cover on-campus responsibilities while faculty advisory personnel are on field assignments.

At this point, regional bureau representatives of AID pointed out that a substantial demand has been built up in problem areas requiring advisory services. The Latin American Bureau, for instance, is especially anxious to receive the results of their research findings in the area of low cost delivery systems, functional analysis, and health planning. Maintenance of an advisory capacity is therefore essential to the program. While most funding for such consultative service comes in the forms of contracts, basic support is necessary to maintain a continuing capability to respond to requests. Priorities for responding to requests for advisory service will be determined by AID and the country's priority. First priority would of course be given to countries of importance to AID and about which DIH has considerable knowledge. Next, priorities with respect to type of service would be given to those functional categories in which DIH has special expertise and potential for immediate benefits. This would include particular opportunities for productive application of the results of research. It was felt that a utilization grant should include a contingency cost for quick response services for consultation which would not otherwise be covered by such devices as contracts and country grants.

(4) Collection and Dissemination of Health Data and Information

In connection with this topic, it was mentioned in the issues paper that the collection and dissemination of information on international health is at present inadequate in U.S. institutions and international organizations Discussions centered around how the grant proposes to support the establishment of collection of documents, data, and other information at Johns Hopkins University. In fact, the question was raised as to whether JHU should be a central repository for all data and other information in connection with international health. Hopkins does have a retrieval and collection system for data banks for those countries in which Johns Hopkins makes studies or performs various advisory services. DIH has not attempted to set up a library system except for JHU generated material. It was suggested that the National Council for International Health might be considered for a central repository. Dr. Taylor did not think that Johns Hopkins was the appropriate site for such a center. Some of the

information efforts of DIH that could be funded under a utilization grant would be faculty publications, both completed and in preparation pertinent to the key problem areas of AID, a new collection of teaching manuals for auxiliary and para-medical health programs which are now in preparation and which may run approximately to 40 or 50 volumes, a health planning data bank based on data acquired by Johns Hopkins for countries in which they have particular interest and a bank of video tapes covering topics in international health, family planning and nutrition. About twenty of these are planned for taping in the next several years.

And finally in this area, Johns Hopkins publishes the International Journal of Health Services which is periodically issued and contains a number of articles on health delivery systems, as well as health planning and economic analysis. Johns Hopkins is also involved at the moment in a revision of its manual on health planning. This should be continued as it has become a definitive work for health planners in methodology and technique. Dr. Taylor felt that the principal obligation of an academic department is the generation of information and its dissemination within the limits of its ability.

The team agrees with Dr. Taylor's description of the role of the university, but feels that wider dissemination of information materials should be made under the utilization grant.

(5) Institutional Linkages

A whole network of linkages now exist between JHU and various institutions and individuals around the world. The team discussed the need to organize them into a pattern of programmed linkages to accomplish specified purposes on several levels:

1. Institutional linkages on the domestic level with other university programs in international health and U.S. based international organizations, e.g. PAHO, Church World Service.

2. On the international level with W.H.O., The Christian Medical Commission, etc.

3. On the LDC level with LDC institutions and key individuals.

The purpose of these linkages, e.g., may be to transfer new ideas or assist in problem-solving in the development of health planning and the delivery of health services to the working level of activities in the LDCs by participating in joint operational programs, joint research, faculty and student exchanges, the sharing of curriculum materials with LDC training

institutions, and by personal contacts with former students and national leaders. Since change must take place within the cultural, social and political framework of the LDC, it can only be effected by LDC personnel and the input of JHU will be the transfer of ideas and innovative joint approaches to LDC problems through LDC linkages.

JHU has a wealth of contacts with former students who have now reached positions of influence in LDC institutions and government programs. The faculty also serves as governing board members or consultants to numerous organizations active in the international health field. Therefore, they are able to get a LDC feedback into their university teaching program and to act as the transfer agent for innovative approaches among various groups. The establishment and maintenance of institutional linkages at these various levels is an ongoing activity by all members of the faculty and should be included as part of the core activity which any utilization grant supports.

FINDINGS AND CONCLUSIONS

The review made it clear that the DIH staff capabilities under the 211(d) development grant had increased considerably in teaching, research, supervision and design of projects, and in new techniques and methodologies for microplanning. The PHA/POP evaluation report on the University Services Agreement with Johns Hopkins, University of North Carolina and the University of Michigan dated November 11, 1974 in discussing the performance of the schools, states that JHU is the most qualified in the management and operation of its activities.

There is some doubt as to the University's ability to furnish additional financial support to the Division of International Health and the team was convinced that a viable response capability could only be maintained by the continued infusion of funds from external sources. There was no doubt as to the intent and committment of the University to maintain international health as a major mission and objective of the University as evidenced by Dr. Morgan's statement. The team was concerned with the need for more cooperation and discussion on research strategy and the focus of research on the key problem objectives of AID. The team also felt that greater attention should be given to domestic linkages for purposes of inter-institutional contributions to problem solving in the LDCs. It was also concluded that Johns Hopkins potentially had the capability in a single organizational entity (the Department of International Health) to assist in most aspects of health planning and health delivery systems. There was some feeling on the part of the team that the DIH response capability for field consultation needed to be strengthened. An

extension of the grant would have to provide for release time during the absence of one or more of the teaching staff on assignments. The team felt that in general AID's KPA objectives coincided with the DIH objectives in two of the problem areas.

It was generally agreed that there had been some problems in communication between AID and DIH, especially in research, in that AID did not tell the University just what it wanted, and in turn DIH had not taken TA/H into its confidence in setting up its priorities. The team was impressed with the recognition of DIH by its peers as a major influence in international health as evidenced by the awards of national and international prizes in that field to the Department. The team also evidenced interest and commended JHU on the "think tank" activity of DIH staff whereby its members participate in long range planning bodies of APHA and other organizations for LDC development.

Achievement of Grant Purpose

Given the lack of requirement for definite activities and given the broad general objectives of the earlier 211(d) grant, the Division of International Health has accomplished a great deal. Quantitatively, the staff has been supplemented in numbers and by the addition of greater interdisciplinary resources and capability. The curriculum has been developing in the areas of planning and delivery services as related to the needs of LDC's and AID objectives. Even though no quantitative goals were set in terms of trained planners, it was concluded by the team that there is evidence that the grant had served to enhance the capability of Johns Hopkins to train senior health planners and leaders in LDC Public Health.

In terms of the "ability of the Institute to strengthen research capability" there was no stated research strategy, but the DIH conference method for selection of research projects developed a comprehensive list of projects that related to health planning and delivery systems.

Support by the University

It was evident that the University supports DIH and regards it as the focus for their international activities as indicated by the statement of the Vice-President. It was, however, also obvious that such verbal commitment was not supported by actual funding commitments for any long period of time. It was obvious to the team that DIH would cease to function as an organization that could effectively support AID's international health activities without a continuing flow of external funds for the indefinite future. While the conclusion was reached that AID should not commit itself indefinitely to be the major supporter of DIH, it is

evident that a 211(d) in the utilization mode is necessary so long as DIH serves AID priority purposes and utilization by USAID's, other donors and/or LDC's warrants such support.

Compatability of DIH Research Objectives with AID Priorities

The lengthy discussion of research strategy led to the conclusion that a comprehensive research strategy had not materialized during the period of the grant and although research competence in design, conceptualization and methodology had increased substantially, a broad program addressing AID's and LDC's needs had not been mutually developed by Johns Hopkins and AID. It was obvious to the team that if AID is to support and utilize the research capabilities of DIH, there is need for closer planning coordination in strategy determination and priorities and informal dialogues between AID's regional bureaus, selected USAID's, and DIH during the course of research activity. The discussion also brought forth the necessity for Johns Hopkins to make its research results available more widely by dissemination of data and information through publications, seminars and discussions. The team also concluded that in the research area as well as in other activities, linkages should be established toward common goals with domestic "sister" institutions. The discussion also led to the conclusion that the DIH teaching and research competence in the economics of health should be strengthened considerably especially in producing cost-effectiveness studies to support low cost delivery systems.

Information Collection and Retrieval

It is evident that Johns Hopkins is not in a position to maintain information repositories and data banks on all aspects of international health. The effort and resources required for an extensive information collection and dissemination system would tax the Department of International Health far beyond its capacity and expanding its capacity to accommodate a total information system would be inappropriate for a department of a university. ~~The review team concluded that~~ DIH should continue to collect information and data on the selected countries and subjects that it had a specific interest in, and that it should expand the dissemination of its collection of planning documents, manuals, videotapes and other information relating to its areas of competence and interest. ~~As a result of~~ the discussion on information, the team agreed that a broader data bank and information retrieval system on all aspects of international health is greatly needed and that AID and other interested parties should seek to establish such an information program within a private foundation or organization especially set up for that purpose. DIH, along with other health institutions, could feed in its information and data to such a system for retrieval and dissemination.

Advisory Service Response Capability

The team was convinced that the 211(d) institutional development grant had played an important role in improving and expanding the capability of DIH to provide advisory services to AID, LDCs and other donors for assistance in health planning. However it was clear that the demands of teaching and other university commitments limited the staff's ability to satisfy much of the AID requirements for field technical advisory service planning assistance and advice on delivery systems for health, population and nutrition. It was felt that a utilization grant must give priority to providing support for advisory service to LDCs in depth. With the expected frequency of demand, means must be found to provide release time so that the consulting staff could respond more readily to anticipated AID regional bureau and LDC requests. The range of competence displayed by the faculty of DIH convinced the team that Johns Hopkins provides a rich resource in planning, manpower, project design and evaluation of low cost delivery systems and national health planning programs.

Institutional Linkages

In the course of the development of DIH, both prior and during the current grant, important linkages have been developed with LDC institutions and ministries. The linkage with Narangwal and villages in the Punjab has served to make that site a key laboratory for training, research and testing of new methodologies in planning and low cost delivery systems. DIH, through its training of senior planners, its degree programs including field residencies and short training courses in LDC's, has achieved an established network of LDC institutions with which it can collaborate in dissemination and demonstration of research results. In addition, as a result of its technical advisory service in health planning and manpower planning for many LDC ministries of health, a solid base is available for achieving AID health goals in a number of LDCs. The team concluded that the linkages already established would be a critical factor in assuring widespread collaboration with and utilization of DIH resources if the present grant is extended into an active utilization phase.

The team was somewhat less impressed with the nature of cooperative and collaborative linkages that DIH has established with U.S. institutions. There are some interchanges of information and knowledge with other universities and public health schools in the U.S. but neither concerted efforts nor joint collaboration with other institutions toward problem solving in key health areas was apparent. The team felt that greater efforts should be made by both DIH and TA/H to develop specific and purposeful linkages leading to faculty and student exchange, joint research, etc.

RECOMMENDATIONS

The review team recommends that the existing grant be extended and converted into an active utilization phase but, within the framework of the findings and conclusions set forth above, be subject to the following qualifications and/or conditions:

1. The university should continue to seek other external sources of funding for its international program in DIH with the aims of reducing its unhealthy dependence on AID for so large a proportion of its support.

2. The principal activity financed by the grant should focus on the areas of AID priority, i.e., health planning and low cost delivery systems. These priorities should be reflected in DIH training and curriculum, research strategy, and in faculty competence to give technical advisory service to LDCs.

3. DIH should develop jointly with TA/H and AID's Regional Bureaus a research strategy and program designed to respond to LDCs and AID's priority requirements.

   To this end, an informal committee for research strategy and priorities should be established with members from both AID and Johns Hopkins and perhaps with the addition of representatives of WHO, PAHO and other major international groups.

4. Priority should be given to using grant funds to increase institutional response capability for technical advisory services in the field. This means more interdepartmental involvement of economists, social scientists and physicians in direct assistance to LDC's. Provision should be made with grant funds for more release time for DIH staff to be involved in response to LDC and AID requests.

5. The university should continue and intensify its collection of information, data and documents within the range of its interests and country orientation. Efforts should be made to broaden the dissemination of Johns Hopkins publications data and country information to a larger clientele, especially the data available on AID KPA's.

6. DIH should continue to establish and strengthen LDC linkages with a view to facilitating and encouraging the establishment of strong national institutions for training, planning, research and demonstrations in health planning and low cost health delivery systems.

7. Grant support should be provided for other utilization activities including but not limited to the following:

   - The conduct of at least two training projects per year in LDC's to train planners in techniques and methodologies of health planning and planning low cost health delivery systems.

   - The holding of periodic meetings (two to four) each year with linkage institutions either in the LDC's or in the U.S.

   - The revising and updating of the DIH health planning manual and its distribution to LDC and other institutions as widely as possible.

   - Devote more time and resources to studies of effect of the economic development on health, and to cost effectiveness studies of alternative health measures.

   - Relate the overseas field requirements for graduate students and international health residents to ongoing AID planning and low cost delivery programs in LDCs.

Attachment

SUPPORT AVAILABLE TO DEPARTMENT OF INTERNATIONAL HEALTH FY '75

GOVERNMENT SOURCES		
AID		
csd 1939	$191,378 @	
nesa 435	257,484 ***	
ta c 1085	23,115 @	
pha c 1039	431,312 *	
csd 2832	17,002	
csd 2956	11,105	
Total AID		$ 931,396
NIH		
5 P01 HD06268-02	9,827	
AM 09980-10	42,484	
3 R09 FM 09640-08SL	1,551	
Total NIH		53,862
PRIVATE SOURCES		
Miles Laboratories	10,517 @	
The Pathfinder Fund	10,000	
Chesapeake Physicians, P.A.	3,000 @	
China Medical Board	8,350	
World Health Organization	4,224	
The Edward M. Ryan Prize	10,000	
Christian Commission for Development in Bangladesh	61,981	
Total Private Sources		108,072
UNIVERSITY SUPPORT	92,277 @**	
Total University Support		92,277
TOTAL SUPPORT		$1,185,607

Sources of support marked (@) will be utilized in FY '75 primarily to support the activities of the Baltimore faculty.

* Includes approximately $90,000 of support for Department activities. Balance restricted to local project costs in Nigeria.

** In previous years the University provided less than 1% of Department funding.

*** Primarily for special research project analysis.

12/5/74

Attachment

THE JOHNS HOPKINS UNIVERSITY
School of Hygiene and Public Health
Comparative Statement of Revenues and Expenditures
(Thousands of Dollars)

	General Funds			Sponsored Research, Training and Other Programs	Total
	Actual 1972-73	Budget 1973-74	Budget 1974-75	1974-75	Budget 1974-75
Revenues					
Allocated General Revenues	$ 2,095	$ 1,733	$ 2,990	$ -	$ 2,990
Designated Funds	-	-	-	-	-
Endowment Income	703	818	916	-	916
Funds Functioning as Endowment	-	-	-	-	-
Restricted Gifts and Grants					
Government	444	462	465	12,010	12,475
Private	66	144	150	900	1,050
Other Sources	17	12	13	-	13
Auxiliary Enterprises	114	162	125	-	125
Total	$ 3,439	$ 3,331	$ 4,169	$12,910	$17,079
Expenditures					
Instruction and Research	$ 1,454	$ 1,521	$ 1,973	$12,424	$14,397
Organized Activities	42	53	36	486	522
Libraries	22	29	31	-	31
Operation and Maintenance of Plant	766	834	874	-	874
General Services and Administration	503	473	511	-	511
Student Services	162	153	166	-	166
Student Aid	117	100	400	-	400
Auxiliary Enterprises	144	168	178	-	178
Contingencies	-	-	-	-	-
Total	$ 3,210	$ 3,331	$ 4,169	$12,910	$17,079
Excess(deficiency)of Revenues over Expenditures	229	-	-	-	-
	$ 3,439	$ 3,331	$ 4,169	$12,910	$17,079

POTENTIAL AREAS FOR RESEARCH

1) Health Planning

a) Cost/benefit matrix in allocation of resources.

b) Applications and refinement of functional analysis methodology.

c) Approaches to decentralization of planning and getting maximum peripheral involvement as a means of improving implementation.

d) Methods of job analysis in functional terms as basis for reallocation of roles in manpower planning.

e) Educational planning for new role allocations.

f) Motivational issues at the interface between health and population planning, especially the strength and manipulability of practical program considerations arising from the child survival hypothesis.

g) The ethical-political issues arising from the increasing inability to cope with famines and disasters.

h) The administrative and planning considerations relating to how disaster relief can be used to promote general development rather than interfere with it, with special reference to nutrition planning.

i) The ethical-political issues arising from the current U.S. and worldwide posture on international assistance as they relate to health-population and nutrition planning.

j) The balance of program relationships between nutrition planning, population planning and health planning.

k) Relation between categorical programs and general health services with methods of integrating them when the categorical program is in a maintenance phase.

l) Efficiency/equity trade-offs in the location of health services.

m) Assessment of the relationship between content, context, and effectiveness of health services.

n) Identification of appropriate health-service activities for delivery of health care under varying circumstances of health needs, socio-cultural constraints, density of population, terrain, level of skills of available manpower, etc.

2) Low Cost Delivery Systems

a) Entry points for family planning in delivery systems integrating health, family planning and nutrition.

b) Practical methods of maintaining program synergism between activities for improving nutrition and infection control.

c) Measures to maintain and improve environmental conditions as part of integrated peripheral services.

d) Patterns of organization that can be adapted to the needs of the urban poor as well as the rural poor.

e) Basic issues related to practical measures making it possible for communities and families to pay for their own health care while maintaining a primary emphasis on complete coverage as part of a general effort to diminish corruption and inefficiencies in administration by getting control into the hands of consumers.

f) SSelection of peripheral primary care workers and means of matching worker profiles to village profiles.

g) Supervisory patterns in the health team and simplified information systems.

h) Adjusting training to job analysis especially through in-service educational activities.

i) Mobilization of resources within the community especially local payment mechanisms, practical measures for identifying, training and using village volunteers.

j) Epidemiological studies of health and nutrition problems and how low cost delivery systems can be adapted to meet specific health needs.

k) Improved use of specific family planning methods in integrated health systems.

l) Alternatives to fixed service delivery points.

m) Development of integrated low cost health delivery systems so as to incorporate existing specific disease control programs.

n) Development of effective and simple information and record keeping systems for low-cost delivery programs that permit adequate evaluation as well as provide immediate information for control and management.

ATTACHMENT c

1. Listing of Faculty Competence in DIH

a. Carl E. Taylor, M.D., Dr. P.H., Professor and Chairman

1) Integration of health planning, population planning and nutrition planning and integrated service packages for family planning, nutrition and maternal child health.

2) Ethical and value issues in the planning process.

3) Community involvement in health planning.

4) Job analysis in integrated health teams and educational planning to accommodate reallocation of functional roles and for teaching in public health and community medicine.

5) Design of research projects for low cost delivery systems and for field surveys for defining need and demand.

b. Timothy D. Baker, M.D., M.P.H., Professor

1) Health planning techniques.

2) Health manpower planning.

3) Evaluation of health services.

4) Design and evaluation of low cost health delivery systems.

5) Combinations of epidemiologic and economic techniques in health planning and development of low cost health delivery systems. (Areas of previous work in the health field - India, Ceylon, Taiwan, Indonesia, Saudi Arabia, Vietnam, Thailand, Brazil, Peru, ElSalvador)

c. William A. Reinke, Ph.D., Professor

1) Evaluation of health and family planning projects or programs; especially developing planning cells and information systems.

2) Health practice research, operations research, systems analysis in health and family planning.

3) Planning of health services, applications of functional analysis and utilization patterns of health services.

4) Development of alternative approaches to health administration, allocation of job responsibilities, and control and management functions.

d. Robert D. Wright, M.D., M.P.H., Professor

1) Integrated service packages for family planning, nutrition and maternal child health.

2) Ethical and value issues in the planning process and training of health personnel.

3) Educational programming to accommodate reallocation of functional roles.

4) Design of projects for low cost delivery systems.

5) Educational planning for public health and community medicine.

e. Alan L. Sorkin, Ph.D., Associate Professor

I am willing to consult on projects in the economics of health and development in the summer months and January (my duties at UMBC preclude consultations at other times during the year).

f. Prakash Grover, M.P.H., Ph.D., Assistant Professor

1) Exploring collaboration potential of indigenous medicine systems in furthering the objectives of official health systems.

2) Health services delivery systems and problems emerging from: factors related to the providers of care and their organizations; socio-cultural characteristics of the populations served.

3) Planning health service projects for rural populations within the constraints of a less developed economy.

4) Strategies for community health education for rural populations.

5) Family decision-making processes.

g. Jeanne S. Newman, Ph.D., Assistant Professor

1) Location of service delivery points.

2) Catchment area analysis - boundary definition, regional assignments.

3) Routing of mobile units.

4) Development of small special-purpose data archives, information unit for health, population planning.

5) Evaluation of demographic data for health and population planning.

6) Population estimation and projection - national, regional.

7) Demographic analysis - fertility, mortality, inter-regional migration flows.

8) Social area analysis.

9) Analysis of regional settlement structure.

10) Field surveys - sampling, questionnaire design, quality control.

h. Robert L. Parker, M.D., M.P.H., Assistant Professor

1) Assessment of health services (functional analysis, evaluation, health services research).

2) Research-development-organization of low cost delivery systems (rural, auxiliary based).

3) Integrated MCH-family planning services.

4) Field research - organization and implementation of health related studies (surveys, health service statistics, observational studies, etc.)

i) R.S.S. Sarma, Ph.D., Assistant Professor

1) Design of community health and family planning studies.

2) Conduct of demographic studies and evaluation of family planning programs.

3) Curriculum development and teaching of demography and biostatistics.

4) Cost-benefit and cost-effectiveness of health and family planning programs.

5) Development and use in evaluation of service statistics.

6) Development of macro and micro demographic models.

7) Data management and analysis in the field of health and family planning.

j) Melvyn C. Thorne, M.D., M.P.H., Assistant Professor

1) Design, organization and management of family planning and maternal and child health services.

2) Programs and techniques for training of health personnel.

3) Design, organization, management and use of service for evaluation of health services.

4) Training of auxiliaries and indigenous practitioners.

5) Planning for population education, including design of teaching materials and training of teachers.

6) Health planning and population planning.

k) Arnfried A. Kielmann, M.D., M.P.H., Research Associate

1) Organization of field surveys for defining health and nutrition needs and demands.

2) Design and evaluation of nutrition research, demonstration or service programs.

3) Development and evaluation of integrated service packages for maternal-child health and nutrition.

4) Design and evaluation of low-cost service delivery programs.

5) Elaboration and evaluation of health auxiliary training programs.

6) Health and nutrition service planning and their intergration.

Small Research

Description of a Project to Study Financing Mechanisms for Health Services

Narrative Statement: The project is to inventory financing mechanisms in use in three countries, describing their current use, capacity, efficiency, effect on demand for service, equity and consumer acceptability.

Purpose and Products: The purpose is to improve health planning methodology. Products will include a simple methodology for financing analysis, and a document for planners describing financing techniques actually in use in Latin America and their advantages and disadvantages.

Significance and Rationale: No such study exists for developing countries, although one was requested by the Pan American Health Assembly. The utility of both the method for financial analysis and the inventory of evaluated financing mechanisms in health planning seems obvious.

Research Coordination, Utilization and Linkages: The results will be promulgated through Health Sector Assessments and a series of planned regional health planning conferences. The results will also be submitted for publication in learned journals. The use of a panel of senior consultants drawn from outside AID will facilitate coordination of the project with other agencies.

Management: The Office of International Health will provide technical advice. The project will be implemented through personal services contracts.

Funding required: $25,000

Small Activity Requirements

($000)

KPA: 12 health planning Project: Special Projects	Funding Requirements FY 76/ I.Q. / FY 77		
	60,000	20,000	60,000

1. Regional Health Planning Conferences

   a. The dissemination of new knowledge and the gathering of up-to-date information concerning health planning problems in LDCs to revise KPA strategy are important activities to assure the quality of the Agencies' programs in health planning.

   b. The purposes of the conferences are:

      i. To gather information concerning health planning problems in LDCs from planning personnel of LDCs, and

      ii. To disseminate new knowledge in health planning, particularly that knowledge resulting from AID financed activiies. Four regional conferences are proposed for FY 1976. Discussions have already been initiated with the Latin American and NESA bureaus on potential conferences for their regions.

   c. It is proposed that the conferences be organized in conjunction with LDC institutions or international organizations.

   d. It is proposed that AID Missions finance travel and per diem of participants from their country to a 4-5 day conference held in the geographic region.

   e. Conference results will be compiled and disseminated to institutions involved.

   f. If the activity can be undertaken in conjunction with LDC institutions, the manpower requirements will be only 1 man month per conference. If the conference arrangements have to be made by TAB, this aspect of the activity should be delegated to a consultant or other contractor with experience in convening international conferences.

   g. It is estimated that each conference will require approximately $20,000 of central funding.

Small Activity Requirements

12

Key Problem Area (KPA): / Health Planning FY 76 IQ 77
12,000

Project: Special Projects

Activity: A two-day workshop for AID and AID-sponsored health planners and health personnel.

a. In the rural areas of the less developed countries most efficient use of resources for health services is often impeded because traditional beliefs and practices related to health are different from those of personnel planning and operating health programs.

b. The purpose of the two-day workshop is to familiarize AID health planners and personnel with the "non-medical" forces in traditional societies which are critical to the success of health programs.

c. The workshop will open with a paper on applied medical anthropology and its usefulness in health planning. Two medical social scientists will be invited to present "plans" using AID guidelines for realistic low cost integrated health projects in the geographic areas of their expertise in the LDCs. In addition, 3 case studies will be presented by individuals with personal experience in rural health programs and these will be examined and discussed by AID personnel and the social scientists.

d. Most of the invitees from AID will be Washington based with perhaps a few from representative contractors and from the field. State/AID conference facilities will be used.

e. The workshop will take place in early November. There will be a minimum, if any formal published material and no published proceedings. Ideally enough useful data will be generated by the conference to consider the production of a manual or handbook of medical "social indicators" for use in the field.

f. Two contractors for conference organization and content will be required for two months before the end of FY 75 in order to arrange for resource people, develop conference content, select attendees, and arrange for facilities. Follow-up and final arrangements will take place in the fall of 1975.

Small Activity Requirements

25,000

KPA: (12) Health Planning — Funding Requirements
Project: Small Research Health Impact on Non-health sector Projects — FY 76 - 25,000

Many times non-health sector activities may sensitively influence health status of population, sometimes resulting in improved well being and sometimes in calamitous spread of illness. Little organized knowledge exists upon which to base predictions as to what may be the direction and magnitude of the health effects of non-health sector activities. This project seeks to develop better understanding of the parameters of the relationships between health changes and non-health sector projects such that further research may be more adequately planned.

The major assumption to project success is that research techniques exist to carry out research on the cited subject.

The alternative to this project is the investment of large amounts of staff time to independently explore research options and techniques.

Estimated project cost is $25,000.

Small Activity Requirements

KPA 24
Project: books and publications

Funding Requirement		
FY 76	I.Q.	FY 77
2,500	750	3,000

Field Technical Support

a. Field health and population offices normally do not have access to current information on health planning methodology, health delivery system innovations or new concepts in environmental sanitation. When they are aware that such information exists they frequently cannot obtain them due to constraints in technical support funds.

b. The purpose of this activity is to provide current technical information on health to AID mission personnel.

c. TA/H will identify bibliographies, professional journals and other materials for distribution to field missions. Missions will be circularized to determine their needs and materials will be periodically distributed from TA/H.

d. Approximately one man week professional time will be required initially and usually to determine technical information availability and mission requirements. Acquisition and distribution will be done by TA/H librarian.

note: this total is for support of both KPA #11 and #12.

DISCUSSION

KPA #13 Environmental Health

In the simplest terms, environmental issues group around two directions of impact: 1) the effects of man on the geographical environment, e.g., air and water pollution, and 2) the effects of the environment on man, e.g., measurable effects on human health. Ecologically, both directional effects are related to each other, but the effects differ. Chemical pollution of air, soil and water in industrial countries to date, have had far less impact on human health than fecal pollution and vector breeding in tropical climates.

From the viewpoint of developing countries, the major causes of morbidity and mortality stem from impact of environmental pollution on human populations; principally, water, soil and food contamination, polluted water sources, and the major endemic vector-borne diseases, such as malaria and schistosomiasis. Absence of protected water sources and sewage disposal for 80% of LDC populations, and the dearth of low cost technologies to correct this situation contribute to the continuing biological hazard to human life. The warm temperatures, perennial breeding of insects, rapid growth of organisms and relatively high rainfall create health conditions which populations in temperate climates are not required to face.

The TA/H program of environmental health seeks to address the above issues in the context of LDC priorities. The World Health Assembly, serving as a consensus of 136 member countries has repeatedly identified "environmental health" as one of the most serious areas of LDC need. The food crisis and its consequent emphasis on increased agricultural irrigation is anticipated to increase the risk of water-borne diseases in the next decade.

TA/H is cognizant that the last 25 years has permitted the growth of donor institutions for capital investment in water supply and sewerage. The AID role in this area has decreased as a proportion of total investment overseas by other donors. Major contributors are the Banks, UNICEF, and OECD countries. Unique needs are not in capital investment, which is available primarily for urban population, but in low cost technologies, oriented to widespread application for the rural poor. The same needs apply to technologies for the control of major water-borne diseases.

Accordingly, TA/H has focussed its program on methodologies to measure impact of environmental diseases on human populations, and on research to identify low cost technologies for mass application. TA/H has contact

with the principal global institutions for water supply and sewerage, and also with key U.S. & foreign institutions responsible for parasitic disease, research, development and control. Close collaboration with WHO permits the sharing of skills and effort.

Within AID, TA/H has collaborated in program development with TA/N on water supply, with TA/Agriculture on insecticide research, with SER/Engr on sanitary engineering, and with Regional Bureaus on field program design.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ ~~Cranton~~
Worldwide

2. Document #1 -- PID
Status: New ☐ Revision # ____ ☐
Proposed Next Document:
Project Statement
Proposed Date of Submission:
August 1975

3. Project Number
511-552

4. Bureau Code

5. Project Title
A. Malaria Immunity and Vaccination
B

6. Estimated Initial/Final Obligation
FY 76 FY 78

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = ____)
AID Approp. 3638
Other U.S. ____
Total U.S. 3638
Host Govt. ____
Other Donor(s) ____
Total 3638

8. Purpose Code
Category Code ____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
		1266			3638	
Total		1266			3638	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.L.C.		
PL 480-Title II		
Total		

12. Project Goal
To reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)
The development of an effective, practical vaccine for human malaria for field use in the developing countries including:

1. Development and testing of an erythrocytic form vaccine in primates.
2. Development of methods for in vitro cultivation of malaria parasites.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W, or for AID/W Documents; date of Distribution: ____

PROJECT IDENTIFICATION DOCUMENT

Malaria Immunity and Vaccination

I Summary

Although this is not a new project, it is a new approach to the problem. AID has supported a research project in Malaria Immunity and Vaccination since 1966 at University of Illinois (1966-1972) and currently at University of New Mexico (1972-present). However, this project will terminate March 31, 1976. The Research Advisory Committee at its December meeting approved the project through March 31, 1976 and recommended an intensive review before considering support beyond that date. After the intensive review, at their March meeting, the RAC recommended that AID establish a collaborative network of research groups on malaria vaccine with University of New Mexico to be considered as a part of the network.

The purpose of the collaborative network is to expedite the development of a vaccine for malaria. The need for a malaria vaccine has been covered in detail in the Project Statement, in the minutes of RAC meetings and in other program documentation.

The WHO Expert Committee on Malaria Immunity and Vaccination at a recent meeting (May 1975) established precisely the same two research priorities previously established by the AID expert consultants in August of 1974, i.e. (1) development of methods for in vitro cultivation of erythrocytic antigens and (2) concentration on testing of erythrocytic antigens in primates. The members of the collaborative network of research groups will address themselves to these priorities in order to expedite the development of a practical vaccine for eventual use in the developing countries.

The major elements of the research required may be divided into discrete areas of endeavor which lend themselves to the collaborative approach.

A. The Sporozoite Vaccine System

(Mosquito Stage Antigens)

Although research on sporozoite antigens has been given a lower priority in comparison to erythrocytic antigens, the expert consultants recommended that work continue on in vitro production of sporozoite antigens and basic studies of sporozoite immunization.

Since it is uncertain as yet whether it will be necessary or advantageous to develop a combined erythrocytic/sporozoite antigen for an effective vaccine; since the sporozoite approach has been demonstrated to be effective in humans; and since the principal bottleneck to a practical sporozoite vaccine is the lack of mass production technology; it may become advisable for AID to stimulate and support more research on in vitro production of sporozoites at a later date, depending on the outcome of studies now in progress.

B. The Erythrocytic Stage Vaccine System

The basic project is concerned with vaccination studies involving the following lines of investigation:

1. The determination of the optimum vaccination schedule and dosage.

2. Screening and testing of potential adjuvants.

3. Development and testing of the optimum primate model system with emphasis on the P. falciparum-Aotus system.

4. Testing of different antigen fractions including a comparison of merozoites and the lyopholized partially purified fraction.

5. Characterization and bio-chemical analysis of the antigen.

6. Development of immunological assays to predict the efficacy of vaccination.

7. Development of laboratory and field testing facilities with a South American University for extension of the primate work, to insure a supply of the Aotus monkeys and pave the way for eventual human trials.

C. In Vitro Antigen Production

The development of in vitro methods for large scale production of erythrocytic stage antigens has been identified as the principal bottleneck in development of a practical vaccine and given a priority even higher than the testing of erythrocytic antigens in primates.

There are two approaches to a solution of this problem that have been followed by investigators so far.

1. Most work has been concentrated on attempts to extend the life of the enucleate red blood cells which are incapable of reproduction.

2. Recent studies have demonstrated a possible avenue of approach by invasion of malaria parasites into nucleated cells with a potential for division suggesting the possibility of in vitro production of erythrocytic forms of the malaria parasite through tissue culture using established cell lines.

Both of these approaches should be pursued.

II Financial Requirements and Plans

Funding of Collaborative Network

(Figures in 000s)

	FY 1976	FY 1977	FY 1978
1. University of New Mexico	425	400	400
2. Laboratory and Testing Facility in South America	100	100	100
3. New York University	79	75	-
4. Rockefeller University	73	79	-
5. In Vitro			
Parke-Davis	200	242	240
University of Hawaii	51		
New York University	38		
6. Additional Collaborators (To be selected)	300	350	400
Total	1266	1246	1140

III Development of the Project

Some progress in establishing this collaborative network has already been made.

A. The basic project with the University of New Mexico has been restructured with the scope reduced to the single element of further development and testing of the erythrocytic stage vaccine system.

B. A contract has already been approved supporting the work of Dr. Ruth Nussenzweig at New York University on sporozoite induced immunity. This project will focus on "Potentiation of the Effects on Antimalaria Vaccination with Immunological Adjuvants". There will be close collaboration and exchange of information between this project and the basic project at the University of New Mexico particularly in regard to the adjuvants chosen for testing in the two different systems. This is especially important in view of the possibility that a combined vaccine (sporozoite and erythrocyte) may be required.

C. A contract has already been approved for support of the work of Dr. William Trager at Rockefeller University on in vitro cultivation of malaria parasites. This project will focus on new approaches to extension of the life of the red blood cell.

D. An advertisement was placed in Commerce Business Daily requesting expressions of interest from sources of advanced expertise in tissue culture wishing to be solicited by AID for a research proposal on development of techniques for in vitro cultivation of malaria parasites with emphasis on erythrocytic forms. As a result of this advertisement, three research groups were requested to submit proposals. The expert review committee (including a RAC subcommittee member) recommended funding of all three projects on the basis that they are all technically sound and represent different approaches to a solution of the problem of mass production of malaria antigens. Contracts will be negotiated with New York University and University of Hawaii with FY 75 funds. The contract with Parke-Davis, a commercial drug firm, will be negotiated in FY 76.

E. Additional collaborating research groups are to be selected. In the interests of expediting the development of a vaccine, certain elements of the work on the erythrocytic stage vaccine system would warrant a larger effort and would be suitable for contracting out with additional research groups to work in close collaboration with the basic project.

These elements include the screening and testing of potential adjuvants and the biochemical analysis and identification of the antigen.

Other approaches to in vitro production of malaria parasites may also be supported.

It is anticipated that two or more additional research groups may be brought into the collaborating network. Another advertisement in Commerce Business Daily will be used to identify the required expertise.

IV Issues of a Policy or Programmatic Nature

The key element in the development of this project is collaboration. Collaboration and cooperation will be developed to the maximum through a) regular monitoring by TA/H staff, b) contract provisions for all future contracts negotiated, c) regular meetings of all AID supported project directors. Cooperation and possible collaboration will also be promoted through the meetings of the Interagency Liaison Committee on Malaria Immunity and Vaccination and on an international basis through the WHO Task Force on Malaria Immunity and Vaccination.

A policy decision will have to be made on the mechanism by which arrangements will be made with a South American University. There are several possibilities.

1. A subcontract with the basic contract with University of New Mexico

2. A direct contract with the South American university chosen.

3. Through the Pan American Health Organization by means of a voluntary contribution (grant) to the PAHO Special Account for Malaria Research.

4. A contract with PAHO.

TA/H and TA/RES will work closely with the RAC ad hoc subcommittee on malaria immunity and vaccination and appropriate consultants in developing the various elements of this project.

PID

Schistosomiasis

I. Summary of the Problem to be Addressed:

Schistosomiasis is a long term chronic parasitic disease of man which occurs predominately among the poor in rural tropical areas. It is endemic in 70 countries or island territories which in 1972 had an estimated population of 1,600 million people of whom about 500 million are exposed and of these approximately 200 million are infected. Schistosomiasis is known to occur in Mauritius, Southwest Asia, the Orient, the Americas and in all countries of Africa except Lesotho. Thirty-four different species and subspecies of snails, each of which differs somewhat in its ecological requirements, serve to transmit the infection. Many of these species are intermediate hosts for parasitic diseases of cattle and sheep.

Severity of schistosomal disease in man varies considerably from place to place and from individual to individual. Factors which appear to have the greatest importance in determining severity of clinical manifestations include the species of parasite, duration of infection, and the number of worms harbored by the individual, i.e., the intensity of infection. Since immunity to schistosomiasis in man is weak at best repeated reinfections can and do occur. This feature contributes greatly to the ultimate development of high intensities of infection which in time can produce clinical disease terminating in premature death following a long disabling illness. Conditions which favor development of serious disease include high population density, a high prevalence of

high intensity infections, poor sanitary conditions, a high density of efficient intermediate snail hosts and frequent exposures of people to snail infested water polluted with waste from infected humans. Extra human reservoirs of schistosomiasis may contribute to the problem in some areas.

Important development activities are contributing both to the spread and to intensification of the schistosomiasis problem. Irrigation systems and water impoundments provide ideal habitates for the intermediate host snails unless attention is given to the need for schistosomiasis control during the construction of such projects. Measures to control snails in irrigation systems include control of vegetation, water flow rates that discourage breeding and engineering designs that favor efficient application of molluscicides. Engineering measures appear at present to have little value for snail control in impounded water particularly large impoundments such as Lake Volta. It appears that schistosomiasis control in such settings will need to focus greater attention upon reducing exposure of the human population to infected water and to reduce water pollution. Measures which are applicable under these conditions also can apply in irrigation schemes. These include the provision of alternate safe sources of water for essential uses, sanitary waste disposal, health education and mass treatment with effective antischistosomal agents, none of which at present are suitable for use in mass treatment campaigns.

The value of the above described control measures has been demonstrated in numerous projects, but despite the existence of a growing schistosomiasis

problem comparatively little use is being made of the available tools. A major reason no doubt is cost and the lack of a capability to provide multidonor responses to requests for assistance from interested schistosomiasis infected countries, most of which are poor. It has been estimated that only one molluscicide cycle per year in all of the 70 infected countries would cost about $160 million at 1972 prices. It should be noted however, that not all areas have such a serious problem that control would be required.

Secretary of State Kissinger during his address to the 29th United Nation's General Assembly, September 23, 1974 said, "In coming months the United States will make specific proposals for the United Nations to initiate: ******; a concerted effort to control the disease which afflicts and debilitates over 200 million people in 70 countries -- schistosomiasis; ******."

The Secretary's initiative for control of schistosomiasis has been followed up by the adoption of resolutions introduced by the U.S. member of the WHO Executive Board and U.S. Delegation to the World Health Assembly. (Tabs A and B).

The problem, in summary, is five fold. First, schistosomiasis is compromising efforts to improve the quality of life of people throughout large areas where efforts to increase food and hydro-electric power production involve irrigation or the construction of dams. Second, since the United States has initiated the present schistosomiasis control effort, it is expected that the United States participate. Third, although control

can be obtained with currently available tools these are being little used presumably because costs generally exceed the resources of the affected countries and there are no data indicating that schistosomiasis has a significant economic impact. Fourth, funds which become available should be concentrated to achieve control in seriously affected areas and to prevent spread of schistosomiasis into new water management projects. Fifth, research designed to develop more cost-effective control measures should be pursued.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
Worldwide - Johns Hopkins University

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
Project Statement
Proposed Date of Submission:
September 1975

3. Project Number

4. Bureau — Code
T.A.B. — 6

5. Project Title
A. Schistosomiasis
B Drug Development

6. Estimated Initial/Final Obligation
FY 1976 FY ____

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = ____)
AID Approp. $175
Other U.S. ____
Total U.S. $175
Host Govt. ____
Other Donor(s) ____
Total $175

8. Purpose Code
Category — Code ____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			175		175	
Total			175		175	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal

To reduce the adverse impact of the physical environment upon the quality of human life by controlling the most critical disease problem of the poor majority.

13. Project Purpose(s)

Carry an existing drug through pre-clinical and Phase I clinical testing.

14. Planning Resource Requirements (Staff/Funds)
U.S. Government Advisors, Two/None
Consultants, Two/$4,000

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W.or for AID/W Documents; date of Distribution: ____ 18/

Antischistosomal Drug Testing Project

1. Project Purpose - This is to evaluate the safety in man of a new drug with demonstrated antischistosomal potency.

2. Project Outputs:

a. Results of safety tests in four mammalian species, including primates.

b. Results of tests for mutagenicity.

c. Results of tests for carcinogenicity.

d. Results of Phase I - safety tests in man.

These are all of the outputs expected from this project. If the drug satisfactorily passes these tests, Phase II, Phase III and possibly Phase IV human safety testing would need to be completed before the drug would qualify for US FDA approval.

3. Rationale:

None of the drugs currently being used in the treatment of schistosomiasis have been licensed by the US FDA. One, Eternol, (Sterling Winthrop Ltd. U.K.) is mutagenic in a bacterial test system, has been reported by some investigators to be carcinagenic, and has been implicated as the cause of death in several patients. It has the advantage over other antischistosomal agents of being effective in a single dose but the disadvantage that it must be injested. Ambilhar (Ciba-Geigy, Switzerland) can be administered by mouth but a 7 day course of treatment is required. Like Etrenol, Ambilhar has been implicated in some fatalities and been reported to exhibit mutagenic properties. Hence, these popular drugs are sufficiently dangerous

that they can be used only under close medical supervision, a serious demerit when dealing with a widespread disease the control of which could be facilitated by mass population treatment. Well documented control programs have indicated the value of both effective drugs and effective molluscicides in controlling schistosomiasis. Greatest successes have been achieved in projects where both agents were employed. Antischistosomal agents devoid of the present demerit would facilitate control.

4. Plans to Coordinate Research:

There are no plans at present to coordinate this research effort with others but this easily can be accomplished through WHO if and when the new drug has satisfactorily progressed through pre-clinical and Phase I human tests. WHO can be advised informally if the project is implemented.

5. Utilization Plans: Not seen as required.

6. Financial Requirements and Plans:

a. Estimated Total Project Cost: FY 1976 - $175,000.

b. Anticipated AID Share: Total.

c. Anticipated LDC Share: None.

7. Development of the Project:

Except for drug testing in primates, all of the resources required for the project are understood to be in place at the Johns Hopkins University in Baltimore, the institution which has

submitted this unsolicited proposal. The principal investigator has already demonstrated antischistosomal potency of the new drug against S. mansoni in infected mice, a greatly superior performance to Etrenol with respect to LD_{50}, mutagenesis in a bacterial system, and chemotherapeutic index. Arrangements for the primate tests are to be made with another institution probably the Lowell Technological Institute in Lowell, Mass.

This is a complex highly specialized technical subject and the Agency should seek the advice of technical authorities in the field of Biochemical Pharmacology. Initially, this assistance can be obtained from Dr. Robert de Caires, OIH, DHEW and Dr. Edgar Martin, FDA, DHEW. Recruitment of external consultants would depend upon their advice.

It is initially planned that the PP be scheduled as follows:

Research Project Statement - September 1975.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
World Health Organization

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
Research Project Statement
Proposed Date of Submission:
Depends upon receipt of proposal

3. Project Number

4. Bureau Code
T.A.B. 6

5. Project Title
A. Schistosomiasis.
B Molluscicide Toxicology.

6. Estimated Initial/Final Obligation
FY 1976 FY 1980

7. Estimated Cost (Life of Project)
($000 or equivalent, $1 = ____)
AID Approp. 1,600
Other U.S. ____
Total U.S. ____
Host Govt. ____
Other Donor(s) ____
Total 1,600

8. Purpose Code
Category Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
Total						

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal

Reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)

Define the long term toxic effects to man, domestic animals, flora and fauna.

14. Planning Resource Requirements (Staff/Funds)

U.S. Government Advisors, Five/$42,500 (Life of project estimate).

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: 185

PID

Toxicology of Currently Available Molluscicides

1. Project Purpose:

The acute effects of currently used chemical molluscicides have been studied reasonably well and their safety for mammals and irrigated crops confirmed but considerably more information is needed on long-term effects and upon the toxicology of the breakdown products. It will be the objective of this project to:

a. Develop techniques for detecting and measuring low concentrations or residues of molluscicides in the environment.

b. Evaluate the toxicity of molluscicides for man, animals and wild life, particularly as regards the cumulative effects of long-term environmental exposures.

c. Evaluate the impact of molluscicides upon biota and ecological systems of both acute and chronic exposures in stationary and flowing waters.

d. Determine the effects, both short-term and long-term, of molluscicides on field and forage crops *per se* as well as the effects upon man and animals utilizing such crops.

e. Determine effects of molluscicides on soil microbial activities particularly as related to soil fertility.

2. Rationale:

Molluscicides are the keystone for most schistosomiasis control operations today and there is little reason to hope that they can soon be replaced by other measures. Although no significant detrimental effects of a lasting nature have been noted to date, this situation could alter as efforts to control schistosomiasis are intensified and the use of molluscicides is increased both in quantity and in frequency of application. Because of the great importance which molluscicides have in the control of this disease efforts need to be made to insure that they do not fall into disrepute, because of preventable adverse effects or because data confirming their safety for man and the environment are not at hand.

3. Plans to Coordinate to Link Research:

Work on this subject has been proposed by the WHO. It is expected that grant funding would be provided to WHO which in turn would coordinate the work of participating laboratories in the United States and abroad.

4. Utilization of Research Results:

WHO is ideally organized to ensure that the results of this research would be properly utilized since they have health personnel assigned to user countries and maintain an excellent health information communications system.

5. Financial Requirements:

Estimated Total - To be determined.

Anticipated AID Share = FY 1976 $200,000.

FY 1977 $350,000.

Anticipated LDC Share - To be determined.

Anticipated Share Other Donors - To be determined.

6. Development of the Project:

The WHO's Division of Vector Biology and Control in the past has organized a well linked and coordinated system of reference laboratories to evaluate and to test new insecticides under different operating conditions. Recently the Division has had a major role in planning the strategy for control of onchocerciasis in the Volta River Basin. Since this project involves the treatment of an extensive river system with insecticides the Division has organized a capacity for monitoring ecological changes which may occur as the project proceeds. The addition of molluscicide toxicology appears to be a logical extension of existing activities which will utilize many of the same resources and techniques which already are being employed in other Division activities.

Dates for the submission of other project documents will be contingent upon receipt of a firm proposal from the Division of Vector Biology and Control.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ ~~Grantee~~
Worldwide

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
Research Project Statement
Proposed Date of Submission:
October 1975

3. Project Number

4. Bureau Code
T.A.B. 6

5. Project Title
A. Schistosomiasis
B Economic Impact

6. Estimated Initial/Final Obligation
FY 1976 FY 1977

7. Estimated Cost (Life of Project)
($000 or equivalent, $1 = ____)
AID Approp. 125
Other U.S. ____
Total U.S. 125
Host Govt. ____
Other Donor(s) ____
Total 125

8. Purpose Code
Category Code ____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			75		125	
Total			75		125	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal
To reduce the adverse impact of the physical environment upon the quality of human life by controlling the most critical disease problem of the poor majority.

13. Project Purpose(s)
Provide an economic justification for schistosomiasis control expenditures.

14. Planning Resource Requirements (Staff/Funds)
Three Consultants/$17,400

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: 1/89

Impact of Schistosomiasis Upon Economic Productivity

I. Statement of the Problem: Schistosomiasis lacks the high visability and dramatic impact that characterize highly fatal epidemic diseases such as cholera or a readily apparent disability such as the blindness that often occurs in onchocerciasis. Costs for control generally exceed the resources of infected less developed countries. Consequently, national planners tend to ignore schistosomiasis in the process of developing national health priorities. Data are needed which will assist in defining the types of endemic schistosomiasis situations in which expenditures for control can best be justified and providing guidelines to national planners.

a. Project Purpose: Since schistosomiasis is not an equally serious problem in all infected areas and since previous studies of the economic impact of schistosomiasis have been conducted in areas of low disease prevalence, it is the purpose of this project to estimate the economic losses attributable to schistosomal disease in an area with a high prevalence of such disease.

b. Project Description:

1. Outputs will be the economic productivity of agricultural workers grouped according to different clinical levels of severity of schistosomal disease and intensities of infection.

2. Estimated Resources Required:

It is estimated that the project will require two years which will be divided into three phases. The one year first phase will be devoted to selection of a suitable study area, preparation of the study design, collection of baseline data, recruitment and training of

staff and establishment of the field laboratory. The next six months, phase two, will be devoted to data collection. Analysis of data and preparation of the final report will be completed in the final six months, phase three.

II. Financial Requirements:

Total Estimated Budget - $125,000.

AID Share - $125,000 grant unless government in the area selected can be encouraged to participate. Total funds should be disbursed in FY 1976.

LDC Share - Subject to negotiation.

III. Development of the Project:

A consultant's review of the worldwide schistosomiasis situation has been completed for the specific purpose of identifying the best site for this work to be performed. Brazil offers many advantages over any other area and its suitability has been confirmed in a review of data with Dr. F. Barbosa of the University of Brazilia. TA/H has received advice from technical experts on the design of the project and on the general staffing required.

It is estimated that 17 field personnel will be needed.

Consultant backstopping should be provided on economics, measurements of physical fitness, statistics and pathology.

Plans are to prepare the PP during Oct. 1975.

The assistance of two consultants and an AID economist will be needed to prepare the PP.

IV. Issues of a Policy Nature:

The only issues foreseen concerns whether or not this activity should be undertaken in Brazil which is considered by the Agency to be a graduate country and whether a request for proposals should be issued. An unsolicited proposal which does not follow the Agency developed plan in all respects has been received.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/Grantee
Worldwide

2. Document #1 -- PID
Status: New ☐ Revision # ____ ☐
Proposed Next Document:
P.P.
Proposed Date of Submission:
November 1975

3. Project Number

4. Bureau Code
T.A.B. 6

5. Project Title
A. Schistosomiasis
B Field test of alternative control measures.

6. Estimated Initial/Final Obligation
FY 1976 FY 1981

7. Estimated Cost (Life of Project)
($000 or equivalent, $1 = ____)
AID Approp. 1,575
Other U.S. ____
Total U.S. 1,575*
Host Govt. ____
Other Donor(s) ____
Total 1,575*

8. Purpose Code
Category Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			75		1,575	
Total			75		1,575*	

11. Other U.S.

Program Type	1st Yr	All Yrs
M.I.C.		
PL 480-Title II		
Total		

12. Project Goal

Reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)

Field test cost-effectiveness of alternative schistosomiasis control measures under different epidemiological conditions.

*Life of project funding cannot be estimated now. Total given is for first two years only.

14. Planning Resource Requirements (Staff/Funds)

Phase I - 24 man-months personal services contractors.

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: ____ /73

PID

Schistosomiasis Control under Field Conditions

This broad subject will involve many elements of the Agency's organization but the important roles which will need to be played by the Country Missions and Regional Bureaus in supporting national control programs are excluded from consideration at this time. Attention is focused instead upon the activities which need to be developed to ensure that any funds which become available are expended to achieve a maximum return in terms of improvement of the quality of human life through significant reductions in the intensity of schistosomal infections and in reductions in the prevalence of schistosomal disease. It is considered desirable that development of these activities be jointly undertaken by TA/H, TA/AGR and SER/ENGR.

Four different groups of schistosomiasis situations are considered to exist. First, are new water management projects which are being proposed for areas threatened by schistosomiasis and which offer the opportunity to provide for schistosomiasis control from the early planning stage onwards. Second, are water management projects which have been completed without providing for schistosomiasis control. Third, are schistosomiasis transmission sites in natural bodies of water. Fourth, are small isolated foci of schistosomiasis where eradication may be possible.

TA/H efforts in schistosomiasis control will focus during FY 76 and FY 77 upon Category II transmission situations, i.e., completed water

management projects.

I. Statement of the Problem:

The transmission dynamics of schistosomiasis, being closely related to human behavior, ecology and the existing physico-chemical attributes of water management projects, undoubtedly vary considerably. Data are needed which will assist in defining the types of problems which must be overcome in order to achieve maximum reductions of schistosomiasis transmission at the lowest cost under the different epidemiological conditions. It is the purpose of this project to assess the different conditions under which schistosomiasis control will have to be achieved in completed water management projects and to develop a guideline to assist in selecting the most cost-effective method for use in a given type situation.

1. Proposed Projects:

a. Outputs, Phase I:

Five different outputs are visualized

1) Identification of Agency assisted water management projects completed in schistosomiasis endemic or threatened areas during the period 1964 - 1974.

2) Characterization of each project with respect to, e.g., prevalence of schistosomiasis, project size, population at risk and physical characteristics of the project.

3) Grouping closely similar projects according to the type of control approach which in theory should be most cost-effective. For example if the population is large and the volume of snail infested water is small, molluscicíding would be preferred to mass treatment

with antischistosomal drugs and visa versa. When both are large alternate water supplies and sanitary waste disposal probably would be most cost-effective.

b. Outputs, Phase II:

Conduct on-site technical appraisals of the situation in a few projects representative of the different groupings and design cost-effectivenes field trials.

c. Outputs, Phase III:

Conduct cost-effectiveness studies under different types of conditions presented by completed water management projects.

2. Resources Required:

Insufficient information is available now to make firm statements concerning required inputs. It has been assumed that information in AID/W would permit identification of Agency supported water management projects completed in the last 10 years. Thus far the assumption has proven false and it is beginning to appear that such information can be obtained only in the field. Under these conditions of uncertainty it is estimated that about 24 man-months of effort will be required to complete steps a., b. and c. described above. This would allow 12 man-months for Africa and six man-months each for Asia, and Latin America. It is assumed that four appropriately qualified people can be recruited on personal services contracts and these components of the work completed in not more than six months.

Following completion of Phase I above, three months would be allowed to select areas for technical appraisal (Phase II) followed by

an additional six months of effort by a team including an epidemiologist, an engineer, a malacologist and an economist to select the sites and develop plans for cost-effectiveness field studies (Phase III).

It is estimated that the Phase III field studies will require a minimum of five years of field observations but until more detail of project areas become available, it is unrealistic to endeavor to estimate requirements for manpower, equipment and supplies.

3. A major assumption in the last element of the project is that five years of field observation will be sufficient to give a valid conclusion regarding the relative efficacy of alternative control measures. Schistosomiasis is a long-term chronic disease and it is primarily among children born after the intervention is introduced that the benefits will be observed.

4. Since no specific sites have been selected for this project, no comments can be made concerning related activities of host governments or other donors.

5. Alternatives to the project are to select schistosomiasis control interventions without regard to their relative cost-effectiveness under different types of conditions. A second alternative could be to redesign and reconstruct existing water management projects to provide better control through engineering measures but it is difficult to consider this a realistic approach.

6. The intended beneficiaries are people who are exposed to the risk of schistosomiasis the majority of whom are poor inhabitants in rural areas of tropical LDCs.

7. It is expected that the project would have a spread effect in the sense that its results would provide the basis for selecting the most cost-effective control measures for use under given types of conditions. This would not be accomplished through non-formal communication or imitation.

II. Financial Requirements and Plans:

1. Estimated Costs	FY 76	FY 77
a. Characterization of completed water management projects	$75,000	nil
b. Technical survey of selected project areas		$ 100,000
c. Cost-effectiveness evaluation of alternative schistosomiasis control measures under different field conditions		1,400,000
	$75,000	$1,500,000

2. Anticipated AID Share - Total*

3. LDC Share -- None**

*No effort has been made to consider the possibility of sharing costs with others, e.g., WHO, but funding by WHO may be difficult to obtain because of the dollar devaluation and soaring operating costs.

**Possible LDC participation cannot be considered until the preferred sites for field work have been identified.

III. Development of the Project:

TA/H since 1972 has been actively engaged in accumulating information on the worldwide schistosomiasis situation. Although the material now available to us undoubtedly does not equal the detailed information

available to WHO on matters as prevalence rates, currently active control and research programs, and special interests of national governments, it goes a long way toward fulfilling our requirements for this project. Relevant background documents include the Proceedings of the Symposium on the Future of Schistosomiasis Control, consultants' analyses of a) all control projects providing cost data, b) results of control programs in various areas, c) worldwide schistosomiasis situation with respect to most suitable areas for economic impact studies, d) outstanding research needs and e) present knowledge of the toxicology of four major molluscicides.

Information is not now available on water management projects that have been completed within the last decade in schistosomiasis endemic areas. TA/H has been advised by SER/ENGR that such information can be obtained only from USAID's or national governments. Nevertheless, efforts are being made to exhaust all possibilities for obtaining the necessary information in Washington through the Office of Data Management. If these efforts fail, and it appears they will, communications will have to be established with the Missions in schistosomiasis infected countries. Definitive action on this is expected to be taken within the next month. Liaison also will need to be established with WHO headquarters and presumably this can be accomplished during the Coordination Meeting in July.

Schecule to Submit:

PP -- Phase I, November 1975.

Estimate of AID Resources Needed:

In addition to the two consultant experts on schistosomiasis, it is anticipated that the project will need the assistance of one engineer who is knowledgeable about the engineering aspects of schistosomiasis control and an economist. Since work in schistosomiasis endemic areas of Agency assisted LDCs is involved it is considered desirable that a project development working group with membership from the Regional Bureaus, TA/H, TA/AGR and SER/ENGR be established.

IV. Issues of a Policy or Programmatic Nature:

It clearly is the policy of United States to support a concerted effort to control schistosomiasis. This has been established in Secretary Kissinger's UNGA address and United States' actions in introducting supporting resolutions in the WHO Executive Board and the World Health Assembly.

Issues which will need to be taken up are programmatic in nature and concern the roles which should be played by TA/H, the Regional Bureaus, SER/ENGR, USAIDs and the WHO.

Department of State

TAB - A

TELEGRAM

HDC

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ACTION COPY

PAGE 01 GENEVA 00461 281121Z

43
ACTION IO-10

INFO OCT-01 ISO-00 HEW-06 OES-05 EB-07 AF-06 ARA-10 EA-10

EUR-12 NEA-09 RSC-01 /077 W

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UNCLAS GENEVA 0461

DEPT ALSO PASS TO BELMONT, DHEW/OIH

E.O. 11652: NA
TAGS: ADRG TRIO WHO
SUBJECT: WHO 55TH EXBD - SCHISTOSOMIASIS

EXBD UNANIMOUSLY APPROVED RESOLUTION ON SUBJECT INTRODUCED BY DR. EHRLICH. IN OPERATIVE PARAGRAPHS:

1. REQUESTS THE DIRECTOR-GENERAL TO INITIATE AN ANALYSIS OF EXISTING CONTROL MEASURES WITH THE INTENTION OF ESTABLISHING GUIDELINES TO THE DIFFERENT STRATEGIES WHICH MAY BE REQUIRED FOR CONTRO OPERATIONS ON A GLOBAL BASIS, WITH DUE CONSIDERATION GIVEN TO THE COST-EFFECTIVENESS OF ALTERNATIVE TACTICAL APPROACHES, INCLUDING PREVENTATIVE MEASURES IN THE PLANNING OF WATER AND LAND-USE DEVELOPMENT PROJECTS;

2. REQUESTS FURTHER THAT THE DIRECTOR-GENERAL SEEK THE COOPERATION OF MEMBER GOVERNMENTS, OTHER INTERNATIONAL ORGANIZATIONS AND APPROPRIATE RESOURCE INSTITUTIONS IN SUPPORTING THE COORDINATING ROLE OF WHO IN THE DEVELOPMENT OF RESEARCH AND STRATEGIES TO CONTROL SCHISTOSOMIASIS;

3. REQUEST THE DIRECTOR-GENERAL TO REPORT ON THIS MATTER TO THE 28TH WORLD HEALTH ASSEMBLY.DALE

UNCLASSIFIED

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TAB - B

TWENTY-EIGHTH WORLD HEALTH ASSEMBLY

WHA28.53

28 May 1975

SCHISTOSOMIASIS

The Twenty-eighth World Health Assembly,

Recalling resolutions EB5.R5 and EB55.R22 on schistosomiasis;

Noting that the disease remains largely uncontrolled and that its prevalence is increasing; and that water development projects designed to improve needed agricultural production and to improve needed economic conditions undertaken without consideration given to preventive health measures may contribute to this increase;

Noting the increasing evidence of the possible occurrence of serious complications and sequelae as a result of schistosomiasis infection;

Noting further that the World Food Conference emphasized the need for greatly increased food production and noted that meeting nutritional and other requirements of the world's expanding population will require more projects to impound water and irrigate fields;

Expressing the view that proper engineering design of water management projects can have considerable importance in limiting the spread of schistosomiasis among populations affected by such projects;

Noting the inclusion of schistosomiasis within the coordinated biomedical research programme of the Organization;

Recognizing that effective planning for, and operation of, schistosomiasis control activities requires close cooperation and coordination among agencies within the United Nations system, the international financial community and ministries within national governments under the leadership of the World Health Organization;

Expressing appreciation for the report of the Director-General which outlines the complexity of the problems involved to prove the feasibility of schistosomiasis control;

Looking forward to the important international meeting on schistosomiasis which is scheduled to be held in Cairo in October 1975; and

Recognizing the very high costs of implementation of control programmes using present available methods,

REQUESTS the Director-General:

(1) to prepare and keep guidelines current on the development of water management projects including engineering specifications, to minimize the possibility of the spread of schistosomiasis and other water borne disease in water management projects;

(2) to advise countries and donor organizations on the application of guidelines on water development, including hydro-electric, projects planned, under construction, or completed;

(3) to request members to make available information on schistosomiasis control programmes underway or carried out in their countries, including details of research work, manpower development programmes, costs, etc.;

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(4) to seek extra-budgetary support and assistance from various sources within the United Nations system and international and private agencies in order to provide assistance

(a) to governments in planning and carrying out studies of the epidemiology of the disease, the cost effectiveness of alternative methods of control and its social and economic impact,

(b) to governments in the preparation and implementation of control programmes,

(5) to stimulate increased efforts in research in drug development, chemotherapy, epidemiology, control including methodologies for self-help, and immunological aspects of schistosomiasis;

(6) to draw the attention of Member States where the disease is not endemic to the desirability of organizing epidemiological surveillance within health services; and

(7) to report on this matter to the Twenty-ninth World Health Assembly.

Twelfth plenary meeting, 28 May 1975
A28/VR/12

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/~~Grantee~~
Worldwide

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
Feb. 1976

3. Project Number

4. Bureau Code
T.A.B. 6

5. Project Title
A. Water Supply Information Network
B

6. Estimated Initial/Final Obligation
FY 77 FY 80 (?)

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = ____)
AID Approp. 1200
Other U.S. ____
Total U.S. 1200
Host Govt. ?
Other Donor(s) ?
Total ?

8. Purpose Code
Category Code____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			300		1200	
Total			300		1200	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal

Reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)

1. To determine the factors which are significant in determining the success or failure of village water supplies; identify and quantify benefits derived from water and/or sanitation projects.

2. Participate in a worldwide network to disseminate information on problems, solutions and benefits.

14. Planning Resource Requirements (Staff/Funds)

Consultants/$22,000

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: 3/4

PID

Water Supply Information Network

I. Problem and Proposed Action

AID has received a Congressional mandate "to prevent and combat disease" among the poor majority in the LDCs. In the LDCs the major causes of morbidity and mortality stem from impact of environmental pollution on human populations, principally water, soil and food contamination, polluted water sources, and the major endemic vector-borne diseases. Absence of protected water sources and sewage disposal for 80% of the LDC populations, and the lack of understanding of low cost technologies to correct the situation contribute to the continuing biological hazard to human life.

The most effective course of action to alleviate the unsatisfactory situation is a matter of dispute. A considerable number of experts believe that the major difficulties in village water supply and sanitation programs are not technical, but rather educational, administrative and financial. These believe the problems are in large part due to the relative poverty of rural communities; their failure to appreciate and make proper use of potable water; the relatively high cost per consumer of village supplies as compared with urban supplies; the encumbered administration stemming from geographical dispersion; and undoubtedly most important, the common neglect of operation and maintenance due to the lack of proper allocation of budgetary resources, the lack of on-going technical assistance, and the lack of administrative attention.

Approximately a year ago the OECD took the initiative, decided that there is a need for greater international consultation and cooperation in this field and that a meeting of interested parties should be held at a later date. Consequently, the IDRC, WHO, UNICEF, IBRD, UNDP, UNEP and OECD, together with representatives of approximately seven nations conducting bilateral assistance programs will convene in November 1975. AID will be represented.

2. The dimensions of the proposed project are unclear, except that funds will be utilized for two objectives:

a. Participation in the international program stemming from the November meeting. Any activity undertaken by AID would be a collaborative effort.

b. Establishment of a network for the dissemination of information concerning water supply and/or sanitation. Such activity would probably involve a contractual arrangement with a U.S. university to staff and operate an acquisition, storage and retrival unit. Such an activity would be parallel to and in consonance with the above international effort.

c. Funds disbursement would take place in FY 77, dependent upon ad hoc committee actions.

3. Major assumptions are 1) that restraints on village water supply and sanitation programs are educational, administrative and financial, 2) a coordinated international effort can be mounted and 3) the objective of that effort coincides with AID's mandate re the majority poor.

4. Host Country activities - To be determined.

5. Alternatives - Since the best means of dealing with the problems of rural water supply remain a matter of debate there are numerless alternatives. Clarification, formulation and assessment of these will be undertaken during the next year.

6. Major beneficiaries - The 80% of the LDC populations especially the rural inhabitants who do not enjoy the benefits of protected safe water and sewage disposal facilities.

7. Replication is not pertinent to this project. There is spread effect in that it will bring attention of benefits of water supply and environmental sanitation to all participating nations.

II. Financial Requirements

Estimated at $300,000 for FY 77. If AID concurs in the ad hoc committee approach, it would probably continue to support the effort at a somewhat lower level for three years beyond 1977. If an AID sponsored approach is approved a three year continuation at the #300,000 level may be considered. All AID funds would grant. LDC and other donor contributions are yet to be determined.

III. Development

1. Uncertainties at the present time in the overall planning and coordination preclude any sort of precise statement as to how the project will develop.

2. The Project Paper will be developed by February 1976.

3. An AID specialist panel will be convened to analyze and evaluate any draft program plan produced by the international agencies.

Short term TDY assignments for WAE consultants and invitational experts will be required. These may approximate four (4) man-months.

IV. Issues

The international ad hoc group seems to be thinking in terms of establishment of a consultative group. Whether or not this is the preferred way and whether AID should participate are policy items to be determined. If the CG approach is undesirable AID must determine whether an independent program best meets AID needs.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
CARE (Coop. for American Relief Everywhere)

2. Document #1 -- PID
Status: New ☒ Revision # _____ ☐
Proposed Next Document: PP
Proposed Date of Submission: July 1975

3. Project Number

4. Bureau TAB **Code** 6

5. Project Title
A. Utilization-Evaluation AID Hand Pump.
B Utilization and Evaluation of Field Test Under Village Conditions of AID Hand-Operated Water Pump.

6. Estimated Initial/Final Obligation
FY 76 FY 77

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = _____)

AID Approp.	407
Other U.S.	
Total U.S.	407
Host Govt.	in-kind
Other Donor(s)	407
Total	

8. Purpose Code
Category Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			330		407	
Total			330		407	

11. Other U.S.

Program Type	1st Yr	All Yrs
F.I.C.		
PL 480-Title II		
Total		

12. Project Goal

Reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)

#1. Further the development of a hand-operated pump, capable of local production, for shallow and deep wells, of optimal design and performance that will gain broad acceptance and usage, reduce maintenance problems and contribute significantly to the success of safe water supply programs in developing countries.

#2. Evaluate the design and accomplishments of a previous AID research contract.

#3. Promote utilization of the information gathered through that previous research contract.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: _____
Title & Date: _____

Date Received in AID/W or for AID/W Documents; date of Distribution: 209

PID
Utilization and Evaluation of Field Test
Under Village Conditions of AID
Hand-Operated Water Pump

Short Title: Utilization-Evaluation AID Hand Pump

Problem and Proposed Action

1. An estimated 30 million or one-half of the world's total annual deaths of 60 million occur in children under the age of five. A majority of these infant deaths are due to malnutrition and infection caused by non-potable water and/or a scarcity of water with which to practice personal hygiene. These deaths and countless bouts of illness are concentrated in that three quarters of the LDC population who depend upon wells and ground water supplies for their domestic water needs. In most cases, a hand pump is the main item required for extracting water without contaminating the source. To be satisfactory the pump must be dependable, be of simple construction with as few points of wear as possible, be of moderate cost and, preferably, be capable of manufacture in the country of ultimate use. Hand pumps have been in use on individual farms or in small communities in the developed countries for several decades. Experience has demonstrated that these pumps normally obtained from the more developed countries have not been sufficiently rugged to withstand the intense wear and tear generated by 12 to 18 hours of daily use in the LDCs.

Several years ago AID recognized the inadequacies of existing hand pumps and commissioned a U.S. research organization to design a more reliable hand pump. A proposed design has been recently submitted to the Agency. However, this design has not been subjected to tests under village conditions for a long enough period of time to be confident that a substantially improved pump has been produced. There is, of course, a wide range of styles of pumps

and lifting devices designed to suit varying water source conditions and levels of needs. The apparent simplicity of many of these devices and their standardized production for many years has resulted in little interest and limited experience in the developed countries of producing their own improved versions.

The unanswered questions and lack of scientific or even quasi-scientific testing under actual field use conditions of various alternatives make an unqualified choice of type and modifications for any particular country almost impossible at this stage. Plans for production of any significant number of any one type are now based on local preferences or capabilities rather than on a proven optimum design. This situation can only be corrected by a systematic, well controlled field evaluation of the more promising alternatives and modifications known. Such an evaluation is proposed here.

The evaluation proposed would have multiple objectives:

a. Seek to identify the most acceptable, dependable, and most easily maintained hand pump available today.

b. Promote utilization of significant results of prior AID research.

c. Provide for an analysis of the recently completed design project which might be used as a basis for further improvement of design.

d. Offer substantial possibilities to the solution of a development problem, i.e, to the alleviation of bacterial pollution which causes unnecessary infant mortality.

2. The new design referred to above which has been submitted to AID was prepared under the following criteria: 1) low cost of production; 2) long life under severe conditions; 3) easily operated by small people (women and children); 4) suitable for both shallow and deep well application;

5) capable of being manufactured in developing countries; 6) easily and simply maintained and 7) designed to minimize pilferage and vandalism. As a result of this contract the contractor has evolved a number of variations in the basic, conventional shallow and deep well pump; new material utilization alternatives have emerged; improvements in durability have been derived and manufacturing costs are believed to have been reduced. However, the pumps, various design innovations and material improvements have not been tested under the severe operating conditions to which they would normally be subjected under routine use in developing countries. Moreover, the limited test program conducted to date appears to indicate an almost total absence of consensus among governments, producers and concerned agencies on the optimum pump for universal use in developing countries. There is little test data to support the varying views of any of the involved parties on basic features of pump design and/or material specifications, or to answer basic questions concerning a comparison of the newly designed pump versus other pump types currently in use in developing countries. Without answers to such questions and without proper testing of various alternatives under actual field use conditions, it is not possible to make a competent selection of pump types and modifications based on objective data and demonstration. At present, decisions to produce any one type or modification in significant numbers are determined by local preferences and existing capabilities rather than proven designs.

Therefore, this project will authorize a contractor (CARE has indicated an interest in the proposal) to design and supervise the field testing of the new AID hand pump operating in six to nine countries, two to three each in Latin America, Africa and Asia, to evaluate its performance against other

pump types in use in the test countries, to determine the feasibility of its manufacture in country and to determine the performance of other pumps against the AID pump design criteria. Included would be such factors as public acceptance, utilization and maintenance since they are part of AID's design criteria. The pumps to be tested, both shallow and deep well, are to be manufactured in the test region. Currently it is anticipated that one African, one South American and one Asia country would be selected to manufacture the AID-designed pump with the pumps then shipped to one or two additional countries within the region. Performance under village conditions will be monitored systematically and the data obtained will be professionally analyzed, interpreted and evaluated.

In terms of the logical framework matrix format the project purposes are:

a. Further the development of a hand-operated pump, capable of local production, for shallow and deep wells, of optimal design and performance that will gain broad acceptance and usage, reduce maintenance problems and contribute significantly to the success of safe water supply programs in developing countries.

b. Evaluate the design and accomplishments of a previous AID research contract.

c. Promote utilization of the information gathered through that previous research contract.

Detailed listing of project inputs and outputs are subject to negotiation with the contractor (CARE or otherwise). At this stage the following outputs are expected:

a. Prototype pumps for the local manufacture of the AID shallow and/or deep well pumps in each of the three countries of manufacture with blueprints and specifications, plus similar data for modifications deemed essential by any of the test site countries.

b. Field test data and analysis for each test country covering the performance of the AID pump and similar data for each other type pump tested. The field test data will cover one year and the comparative analysis will be made with reference to the AID design criteria.

c. A termination report that will include all test data, analyses, evaluations, conclusions and recommendations concerning the AID pump and other designs and the production feasibility of selected pumps in developing countries.

To accomplish these outputs AID must provide the following resources: technical manpower, including consultants, to monitor overall project; funding adequate to permit CARE (or other contractor) to provide administrative personnel, salaries and travel for U.S. personnel assigned to the project; salaries for national personnel; vehicles; purchase of pig iron, leather, pipe, etc. required for local manufacture of AID pump; procurement of comparison pumps; and possibly funds to cover well development and pump installation costs. To tranform these inputs into the above results will require services of personnel in TA/H, TA/PPC, SER/CM and SER/ENGR in the approximate amount of 2 man-months/yr. over a presently estimated 32 calendar month period. Funds disbursement would take place in FY 76 and FY 77.

3. Success of this proposed project is dependent upon the following assumptions:

a. The design modification recommended by the previous design contractor (Battelle Memorial Institute) will result in a more sturdy, longer lasting, more effective pump.

b. The fabrication and assembly of the pump is within the capability of some, if not most, indigenous manufacturers.

c. Developing country governments having a genuine interest in improving the lot of their rural populace will undertake the provision of safe water supplies and will utilize the new pump if it is demonstrably superior to the pump now commonly in use.

4. The proposed contractor, CARE, is currently cooperating with a number of LDC governments in the installation of rural water supply programs. The local governments are in conjunction with CARE providing personnel, materials, equipment, transportation, inspection and administrative supervision. This new project will be super-imposed on those LDC government programs and thus gain indispensable support at no cost. At the entrepreneur level in those countries selected to manufacture the pump, private companies will provide their facilities (foundry, machine shops, assembly lines, etc.), technological competence, sales and maintenance organizations to service their equipment. LDC government activities can be identified more specifically when the final selection of the cooperating countries is complete.

5. Some years ago, AID identified the lack of a satisfactory hand pump for extracting ground water as a major impediment to lessened morbidity in rural areas. In the intervening years a new promising design has been produced and, primarily through the AID organization, has been accorded some worldwide publicity. However, this design is not in wide spread use. Despite the need the International Development Research Center (IDRC), Ottawa, reported as recently as November 1973 that "while there has been some progress, the world still does not have a hard-wearing, long-lasting, easily repaired, locally manufactured hand pump". In view of the continued need, some isolated attempts to solve that need and the publicity AID has given the Battelle effort it is reasonable to assume that if AID dropped its interest in the pump that somewhere, some manufacturer or some government might decide to utilize the product of AID's research.

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The policy of AID undertaking no action is alternative number one. The proposed project encompassing an active attempt to further publicize past work and to demonstrate that a practical method of alleviating insanitary conditions is within the capabilities of most LDCs is alternative number two. A third alternative might be to intensify the afore described proceedures of manufacturing, installing and testing pumps under more varied circumstances. AID might, for example, undertake testing in fifteen to eighteen (or more) countries and to manufacture the pump in each of those countries. In the opinion of the sponsoring office such a massive attempt would accomplish little, if any, more ~~that~~ than the more limited project (alternative number two) proposed herein.

6. The latest report of the WHO states that not more than 14% of the world's rural population had reasonable access to safe water. This project seeks to provide water in reasonable quantities at reasonable costs to the 86% of the rural population not now served. Health statistics indicate that infectious and parasitic diseases, most of which can be controlled by a supply of safe water, have their greatest focus among the rural poor, and that enteric diseases occur as repeated episodes in over half of the children in developing countries. The intended beneficiaries, farmers, share croppers, and residents of very small communities, are truly representative of that "poorest majority" designated as the U.S. target in the FAA of 1973. Few, if any, of those benefited by the project would have annual incomes exceeding $150.

7. The "spread effect"is the objective of the project. TA/H believes the design would be rapidly accepted and put into widespread use if the field comparison undertaken by this project demonstrates the superiority of that design.

II Financial Requirements

1. Project costs - see attached estimate.

2. AID costs - 100% of the total and from funds set aside for Evaluation and Utilization of Research and Development Projects.

3. As noted in I(4) above LDCs would bear a substantial share of the total costs. Estimates for the financial input of each country cannot be made until the countries are selected.

III. Project Development

1. Various aspects of the project have been reviewed by TA/PPU, TA/H, SER/ENGR, the Georgia Technical Institute and consultants from the University of North Carolina and Office of International Health, DHEW. The interest of CARE has been confirmed. The technical feasibility is unquestioned. Criteria for selection of countries and for selection of villages within countries have been drafted. Further work on project design is believed limited to: 1) application of these criteria; 2) identification and selection of indigenous manufacturers and 3) preparation of master check lists. All of these will be incorporated in the final contract.

2. The PRP is scheduled for submission in July 1975 and the PP will be submitted in early FY 1976.

3. Need for consulting services to prepare PRP and PP is not now foreseen. TA/H staff has in the past been able to secure any assistance required from SER/ENGR and/or from internally funded consultants. So long as those services remain available the TA/H office sees no necessity for additional manpower to complete the current onerous programming process.

IV. Issues of Policy Nature

None

Attachment/Cost Estimate

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Estimated Budget

Item	Phase I	Phase II	Phase III	Total
Salaries /1	$ 75,000	$52,000	$ 3,750	$130,750
Travel	3,000	3,000		6,000
Vehicles	45,000			45,000
Equipment	30,000			30,000
Spare Parts	4,500			4,500
Well Impr.	-	12,600		12,600
Direct Costs	18,000	13,500	3,000	34,500
Publications	1,500	1,700		3,200
Sub Total	177,000	82,800	6,750	266,550
Overhead 7.5%	13,275	6,200	500	19,975
Total-Contr.	190,275	89,000	7,250	286,525
Sub Contractor	40,000	10,000	70,750	120,750
TOTALS	$230,275	$99,000	$78,000	$407,225

/1 Based on following man-months:

Phase I	-	73
" II	-	44
" III	-	3
Total		120

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
Johns Hopkins University

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
PROP
Proposed Date of Submission:
Submitted: 4-1/75

3. Project Number
New

4. Bureau
TAB

Code
6

5. Project Title
A. Schistosomiasis-Economic Study
B Socio-economic Analysis of Environmental Health Problems

6. Estimated Initial/Final Obligation
FY 1976 FY 1976

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = ____)
AID Approp. 136
Other U.S. ____
Total U.S. 136
Host Govt. ____
Other Donor(s) ____
Total 136

8. Purpose Code
Category Code____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			101		136	
Total			101		136	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal

Reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)

#1. Expand the previously developed schistosomiasis transmission simulation (STS) model into a methodology which will permit national planners in schistosomiasis infected countries to determine the socio-economic impact (in cost-benefit terms) of water resource development projects.

#2. Assist AID to prepare for each water resource project an environmental analysis acceptable to the Council for Environmental Quality under the legal requirement of Section 102B of the National Environmental Policy Act.

14. Planning Resource Requirements (Staff/Funds)

None

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: 2/9

PID

Socio-economic Analysis of Environmental Health Problems

Short Title: Schistosomiasis-Economic Study

I. Problem and Proposed Action

Schistosomiasis is one of the most widespread parasitic infections of man. Perhaps 700 million people are exposed and as many as 200 million are infected. The disease is endemic in 71 countries, mainly in tropical and sub-tropical regions where sanitation facilities and/or domestic water supplies are inadequate.

Prevention and control of schistosomiasis is an exceeding complex operation because of the six stages of the life cycle of human schistosomes. Complete disruption of any one stage would of course terminate transmission. The possible interventions may be grouped into at least five categories:

a. Chemotherapy (use of drugs within man). However, no drug is 100% effective against every species of schistosome.

b. Molluscicides (chemical agents to destroy snails). Effectiveness is dependent upon toxicity to snails, to water fauna and other non-target organisms, to formulation size, etc.

c. Immunization (strengthening body responses to invasion of cercariae). The body response is not yet clearly understood. Research efforts needs to be continued and expanded.

d. Biological control of snails (use of predator organisms). Over 50 possible agents are known all of which require detailed study before a practical solution can be identified.

e. Environmental (change in living conditions to prevent man-polluted water contact). The mix of community water supply, excreta disposal, health education, adequate engineering safeguards in constructing artificial lakes and irrigation schemes etc., is costly, complex, the effectiveness is often misunderstood and given low rank on the LDC list of priorities.

The main constraints on the application of the above control strategies or interventions stem from the socio-economic setting and the ways in which priorities for social action are established. To develop an overall control strategy each of the above interventions and the multiple variations possible therein must be analyzed to determine the cost-effectiveness and/or cost-benefits which can be derived from adoption of that particular control method. In short, progress is impeded pending development of the tools to assess the economic impact of the disease.

The proposed project, designed to provide one of the tools necessary, will provide a methodology which will permit national planners to determine the socio-economic impact (in cost-benefit terms) of water resource projects. It will also have a secondary purpose of assisting AID to prepare for each water resource project an environmental analysis acceptable to the Council for Environmental Quality under the legal requirement of Section 102B of NEPA.

For further details see draft PROP submitted for TA/PM and Bureau comments on April 1, 1975.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
Worldwide

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
To be determined

3. Project Number
11-590-995

4. Bureau
TAB

Code
06

5. Project Title
A. Global Cholera Strategy, Phase II
B

6. Estimated Initial/Final Obligation
FY 76 FY 77

7. Estimated Cost (Life of Project)
($000 or equivalent. $1= ____)
AID Approp. ____
Other U.S. ____
Total U.S. $100
Host Govt. -
Other Donor(s) -
Total $100

8. Purpose Code
Category
Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			50		100	
Total			50		100	

11. Other U.S.

Program Type	1st Yr	All Yrs
F.L.C.		
PL 480-Title II		
Total		

12. Project Goal

Reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)

To stimulate and assist WHO in planning a global program for the prevention and surveillance of cholera.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: 2-22

GLOBAL CHOLERA STRATEGY

I. SUMMARY OF THE PROBLEM AND PROPOSED RESPONSE

1. Purpose of the Project

It is intended through this project to stimulate and assist WHO in planning a global program for the prevention and surveillance of cholera, including identification of both technical donor resources required to support the global program. The project directly supports KPA #13, Environmental Health, in its objective of improving the quality of human life through the reduction of incidence of cholera and other acute diarrheal diseases, which constitute the principal causes of morbidity and mortality in the lower socio-economic strata of LDC populations. The project is supportive also of general Agency policy in its stimulation of the leadership and coordinative role of WHO. The focus of planning within WHO is on the mobilization and coordination of resources for the development of safe water supplies and excreta disposal facilities; improvement of disease surveillance and laboratory services; treatment facilities; and programs for related logistic support.

2. Proposed Project

A. The estimated outputs necessary to the achievement of the project purpose are the following:

1) A global plan with a series of individual country plans containing an inventory of needs for new or strengthened facilities and services, e.g., diagnostic laboratories, surveillance systems, water supply, waste disposal, vaccine production, etc.

2) Identification of institutions which could play a significant regional role in research programs.

3) Coordination of meetings between WHO and donor nations.

4) Reports, surveys of country anti-cholera programs and related health manpower studies.

5) Design of training programs for indigenous personnel in cholera and enteric disease control and treatment techniques.

B. Estimates of the kinds and amounts of technical and physical resources required are:

1) AID: Budgetary support; specialized expertise to WHO planning process.

2) WHO: Leadership and guidance in the formulation of a global cholera plan; staff services and manpower support at Headquarters and Regional Offices; preparation of technical guidelines; dissemination of relevant documents; and solicitation of donor support and participating country interest.

3) LDC: In coordination with WHO Regional Offices, personnel and general services support; physical plant and facilities; statistical data; professional staff; related country studies; local currency costs.

C. As this project is designed to respond to WHO initiatives; it is impossible to predict how strategy will develop within the WHO. We do not foresee, at present, the need for funding beyond FY 1977.

3. Major Assumptions

Assumptions deemed pertinent to project success are as follows:

A. Multilateral organizations are capable of planning, mobilizing and coordinating international resources to eliminate the threat of pandemic cholera and associated enteric diseases.

B. Multi-nation concern induced by the pervasive threat of pandemic cholera and its resulting social, economic and, particularly, political consequences will increase sufficiently that LDC Governments will undertake the long-term programs necessary to improve environmental health.

C. It is technically feasible to render countries non-receptive to the introduction of cholera vibrios.

D. The development of a global cholera plan requires leadership by an organization having worldwide responsibility in the field of health.

E. WHO is willing to undertake the development of a global cholera plan.

F. The magnitude of a global cholera plan will require the mobilization of multi-national donor resources.

G. LDCs can be motivated to participate in planning exercises, surveys, etc. and will make their own facilities available.

H. Planning will be coordinated with ongoing health programs.

4. Activities by Host Country and Donors

Activities or contributions of other donor nations are unknown.

5. Alternatives

While there are two alternatives to the present arrangement with WHO in the pursuit of a global cholera strategy which might be considered, neither is really feasible. Sufficient bilateral assistance to LDCs by AID is not realistic given present AID priorities, and a second possibility, the formation of a consortium of donor nations offering assistance multilaterally, would be the circumvention of the appropriate role of WHO.

6. Beneficiaries

The beneficiaries of this project will be the entire population of countries invaded by or threatened by invasion of cholera, particularly the urban and rural poor who are most vulnerable.

7. Replication and Spread Effect

Replication is not pertinent to this project. There is spread effect in that it will bring attention to environmental health in general.

II. FINANCIAL REQUIREMENT AND PLANS

If WHO is able to produce a feasible framework for future planning, AID will continue to support this project at approximately the same level for two years beyond 1977. LDC and other donor share of the costs cannot be predicted; however, contribution amounting to $19,475 were made by Austria, Kuwait, Lebanon, Morocco and Upper Volta in 1973 and $6,883 was donated by Ghana, Morocco, and Upper Volta in 1974.

III. DEVELOPMENT

1. Uncertainties surrounding the actual path in planning which WHO will take precludes any sort of precise statement as to how this project will be developed under WHO leadership.

2. A schedule for the preparation of a Project Paper cannot be established at this point in time. This step will be taken subsequent to the receipt of some evidence of WHO planning to date and the relevance of the proposed plans to Agency policy.

a. An Ad Hoc Specialist Panel will be convened to analyze and evaluate any draft program plan WHO may produce and at that time a determination will be made as to the appropriate role for AID in WHO planning.

b. Short-term TDY assignments to WHO are foreseen as a requirement.

IV. ISSUES

The Agency has tacitly committed itself to the Director General of WHO through correspondence in prior years to assist in the formulation of a comprehensive cholera program. This commitment has been evidenced by the provision by AID of grant monies to the WHO Special Account for Cholera in FY 1973 and FY 1975. Further commitment is dependent upon the successful conclusion of the first phase of planning and the delivery to AID of draft document for Agency consideration.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
Bangaladesh

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document: PP
PD
Proposed Date of Submission:
To be determined

3. Project Number | **4. Bureau** TAB | **Code** 6

5. Project Title
A. Cholera Research Laboratory
B

6. Estimated Initial/Final Obligation
FY 77 FY 81

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = ____)

AID Approp.	12,500
Other U.S.	____
Total U.S.	12,500
Host Govt.	375
Other Donor(s)	1,250
Total	14,125

8. Purpose Code
Category Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			2,200		12,500	
Total			2,200		12,500	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal
Reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)
The prevention of cholera and other water-borne disease among the rural poor through specific technical interventions such as vaccine and oral treatment.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: 207

Cholera Research Laboratory
Dacca

I. Summary of the Problem to be Addressed and the Proposed Response

1. Purpose of the Project as it Relates to Sectoral Goals:

More than 60 countries have been infected during the current cholera pandemic which began in 1961. Recrudescence in previously infected countries in Asia, the Middle East and Africa is now being reported, and cholera appears to have become endemic in many newly invaded areas. Twenty-three countries are infected at this time, eleven of which are in Africa. Every new outbreak has led to severe economic disruptions to governments, has placed embargoes on the handling of goods, and movements of people have been restricted. Cholera has become not only a national and international public health problem, but an economic, social and political one as well; and, as yet, there are no specific medical means that are effective in preventing its spread.

This project is intended to develop, evaluate and demonstrate effective techniques, with worldwide application, for the prevention, treatment and eventual eradication of cholera. The project specifically focuses on (1) development of a simplified, low-cost treatment for cholera patients, (2) the search for and field testing of improved vaccines, and (3) the study of all enteric diseases and related health problems.

2. Project Outputs, Resources and Duration:

a. Estimated project outputs necessary to the achievement of the project purpose:

1) Simplified methods for the diagnosis, treatment and surveillance of cholera and related enteric diseases.

2) Research on cholera immunity mechanisms.

3) Field testing of promising immunogens.

4) Research on the epidemiology and pathophysiology of enteric diseases, including cholera.

b. Estimates of kind and amount of technical and physical resources required:

AID - Budgetary support to fund the PASA jointly with HEW/NIAID, and some portion of the local currency costs necessary for the operation of the Cholera Research Laboratory.

NIAID - (1) Responsibility for the scientific direction of the cholera research program, and administrative direction of a Scientific Review Committee and a Technical Committee. (2) Selection and recruitment of a qualified scientist to be Director of CRL. (3) Selection and recruitment, and provision of support of U.S. and Third Country scientists who are essential to the clinical immunological, physiological and epidemiological investigations. (4) Procurement of supplies and equipment. (5) Payment to vendors when dollar instruments must be used.

BDG - (1) Budgetary support for a portion of the local currency costs of CRL. (2) The release for assignment at CRL of senior Bengali scientists. (3) The provision of space and physical facilities, maintenance and repair of facilities and payment of utility costs at the Institute of Public Health in Dacca and the Health Center in Matlab Bazaar.

Other - Visiting scientists from other nations, multi-lateral and regional organizations are expected with funding support provided by the contributing nation or organization.

c. Estimated Disbursement Period of the Project:

Enteric diseases, including cholera, will remain a serious problem confronting LDCs for the foreseeable future. Because a number of variables, the probable success or progress of cholera and enteric disease research cannot be estimated beyond a span of five years; therefore, this project is necessarily limited to the five-year time frame. The disbursement period projected is FY 1977 through FY 1981.

3. Major Assumptions Pertinent to Project Success:

a. Present cholera and enteric disease immunity mechanisms can be improved.

b. The delivery of oral therapy to the poor majority can be managed by para-medical health workers.

c. Extensive research is necessary to determine the epidemiology of cholera and enteric diseases and the causes of seasonal variations in epidemicity.

d. Senior and experienced research manpower and advanced institutional facilities will be brought to bear on research problems.

4. Description of Activities:

The Cholera Research Laboratory (CRL) has been an ongoing Agency project since its establishment in Dacca in 1960, as the field research facility of the South East Asia Treaty Organization (SEATO). An interagency agreement between AID and the Department of Health, Education and Welfare assigned the responsibility for the development and management for this cholera research program to the National Institutes of Health (NIH).

During the ten years prior to the independence of Bangladesh, the laboratory stimulated research in cholera which has developed simplified and inexpensive, but highly effective treatment, has clearly defined the abilities and short-comings of present day vaccines, has trained physicians and para-medical personnel in the care and treatment of the cholera patient, has contributed much basic knowledge on cholera and other diarrheal diseases, and has created a body of expertise and experience which has been influential in the application of improved treatment and control measures in many countries as cholera continued its spread throughout Asia, the Near East, Europe and Africa during the past decade. It has also been influential in removing some of the restrictions on commerce, communications and movements of people.

Since the beginning of the post-independence period, the CRL has operated as an autonomous body under the terms of a Technical Project Agreement signed in Dacca on May 15, 1974, between the Government of Bangladesh and the Government of the United States acting through AID and NIH. The agreement also provides for the participation of other nations, international organizations, and private and public agencies, and the Governments of the United Kingdom and Australia have made available letters of credit worth some $50,000 during FY 1975 for the support of the Laboratory.

Research related to the toxin elaborated by VIBRIO Cholerae, which is responsible for the purging diarrhea of the cholera patient, has been carried out at the CRL, and here in the United States through NIH support to researchers and pharmaceutical companies since 1965. The goal of this research has been the development of a toxoid which promises to offer better protection than that afforded by currently available vaccines. As a step in the scheduled 3-5 year testing period of the toxoid that is now available, it was given to 46,443 persons residing in the field-trial area of the CRL during July, August and September 1974. A control group of 46,395 persons were immunized with tetanus and diphtheria toxoid. Surveillance of these two population groups, to determine the attack rate and protection afforded of these two populations is in progress.

5. Alternatives:

The development of a vaccine was judged at the outset of the project as the most promising alternative in controlling Cholera. Competing alternatives such as the improvement of water and waste disposal facilities and environmental control programs were considered to represent a magnitude of investment and donor support that would be impossible to assemble.

6. Beneficiaries:

The benefits of research conducted by the Cholera Research Laboratory in Dacca accrue not only to Bangladesh, but to the nations of the world in general and particularly to the poor majority who are most threatened by Cholera. Moreover, there have been many "spin offs" of knowledge as to gastrointestinal physiology immunity, and treatment of diarrheal diseases in general in addition to Cholera.

The CRL provides unique treatment facilities for Cholera and other diarrheal diseases for the Dacca Municipality and the Matlab Bazaar Field trial area. As a result of providing free medical treatment CRL's treatment facilities have been the instrument for developing a rapport between the CRL and a large segment of the indigenous population of Bangladesh. This rapport has made, and continues to make, a program of cholera research, as well as other major diarrheal disease problems, reproductive physiology, nutrition, etc. in Bangladesh possible. The effectiveness of the treatment given is amply demonstrated by the data obtained from the CRL during the period July 1 - 31 October 1974. Of 5,313 proven Cholera admissions treated, the greatest number treated during a quarterly period since the CRL was established in 1960, there were only 20 deaths, a mortality rate of 0.38 percent, while that for untreated cases approaches 40-50 percent. For all other 2,694 hospital admissions, including 389 cases of Shigellosis, there were 80 deaths. In addition to the hospitalized cases, 20,971 persons were treated for various ailments as outpatients during this period.

7. Project Replication:

In terms of its primary objective this project promotes research and discovery and concepts associated with replication and spread effect through non-formal communications are not generally applicable. However, cholera dramatizes the need to focus on environmental problems, and in this sense the CRL program exerts considerable influence among institutions worldwide who follow its course and progress.

II. Financial Requirements and Plans

NIH officers who provide the direction of this project believe funding must be maintained at present levels if success is to be achieved. The level of AID support projected for FY 1977 is 2.2 million dollars (e.g. the present level). This level may be expected to increase in future years due to the relatively heavy inflationary conditions besetting Bangladesh at this point in time.

AID is currently funding approximately 90 percent of the total costs of the CRL program. While the 10 percent share carried by the government of Bangladesh and the donors may fluctuate or increase, it is anticipated that AID's share will not be significantly changed.

The CRL summary budget for FY 76 is attached for comparison purposes.

III. Development of the Project

This project has been an ongoing project of the Agency at large since 1960. It has been implemented under a PASA arrangement with NIH/HEW with responsibility for scientific direction and provision of technical staff. Under present arrangements it is anticipated that all future dollar requirements will be provided by AID to HEW for the attainment of project objectives.

The current PASA document is attached as an exhibit.

IV. Issues of a Policy or Programmative Nature

In the experience of NESA Bureau, this project has been functionally and politically very successful. Moreover, it is notable in that it has engendered the least amount of controversy. The rapport between CRL and Bengal citizenry is such that any new program initiatives proposed by either AID or NIH are likely to be well received.

CHOLERA RESEARCH LABORATORY

FY 76 BUDGET ESTIMATES

USAID PORTION

(TAKA)

TYPES OF ACCOUNTS	Local Expenses (Taka)	PASA	Bank of Bethesda 1/	TOTAL (2 + 3)	REMARKS
(1)	(2)	(3)	(4)	(5)	(6)
11 -- [illegible] L SERVICES:	1,014,198	7,520	194,508	1,021,718	
21 -- [illegible] TRANSPORTATION OF PERSONS:	37,634	57,070	56,855	94,634	
22 -- TRANSPORTATION OF THINGS:	18,063	61,250	38,138	79,313	
23 -- RENT, COMMUNICATION & UTILITIES:	92,472	-	1,000	93,472	
24 -- PRINTING & REPRODUCTION:	18,100	3,000	-	21,100	
25 -- OTHER CONTRACTUAL SERVICES:	84,930	322,401 1/	4,700	407,331	
26 -- SUPPLIES & MATERIALS:	303,358	120,000	8,000	423,358	
31 -- EQUIPMENT:	9,575	50,000	4,000	59,575	
TOTAL :	1,578,260	621,241	307,201 2/	2,199,501	

1/ Includes [illegible] to be [illegible] to Bank of Bethesda Account.

2/ Figures are [illegible] in this Total.

CHOLERA RESEARCH LABORATORY

FY 76 BUDGET ESTIMATES (TOTAL OPERATIONS)

(IN DOLLAR)

HEADS OF ACCOUNTS	Local Expenses (Taka)	P A S A		U K	Australia	TOTAL	FY 75 Estimated Expenditure
		NIH Controlled	Bank of Bethesda				
	$	$	$	$	$	$	$
11 - PERSONAL SERVICES:	1,092,650	7,520	194,508	-	-	1,294,678	947,217
21 - TRAVEL & TRANSPORTATION OF PERSONS:	40,470	57,070	56,855	-	-	154,395	84,230
22 - TRANSPORTATION OF THINGS:	19,460	61,250	38,138	6,700	10,000	135,548	75,717
23 - RENT, COMMUNICATION & UTILITIES:	99,625	-	1,000	2,000	-	102,625	56,319
24 - PRINTING & REPRODUCTION:	19,500	3,000	-	-	-	22,500	14,031
25 - OTHER CONTRACTUAL SERVICES:	91,500	15,200	4,700	3,000	-	114,400	113,476
26 - SUPPLIES & MATERIALS:	326,824	120,000	8,000	38,500	31,180	524,504	481,112
31 - EQUIPMENT:	10,350	50,000	4,000	5,000	15,000	84,350	72,628
	1,600	244,040	307,201	55,200	56,180	2,433,000	1,844,730

[redacted]

[redacted]

[redacted]

		Dollar
1. FY 75 Carry-over	...	14,593
2. BDG Contribution 1/	...	74,667
3. UK Grant	...	55,200
4. Australian Grant	...	56,160
5. UNICEF Grant	...	9,000
6. Hopkin's Reimbursement	...	12,000
7. FAP Grant	...	7,773
8. Miscellaneous Income	...	4,006
SUB-TOTAL :		$ 233,499
Request from USG		2,199,501
TOTAL :		$ 2,433,000

1/ This represents contribution in money. In addition the Government of the People's Republic of Bangladesh supplies "in kind" contribution - estimated at $ 261,733.

1. INITIAL STARTING DATE (Mo., Day, Yr.) FY 1966	**PASA** PARTICIPATING AGENCY SERVICE AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND DEPT. OF HEALTH, EDUCATION, AND WELFARE National Institute of Allergy and Infectious Diseases, NIH, PHS	6. ☐ PASA ORIGINAL ☒ PASA AMENDMENT 6
2. PROJECTED COMPLETION DATE (Mo., Day, Yr.) June 30, 1977		7. PASA NUMBER NESA(HA)22-72
3. CATEGORY ☐ TDY ☒ ASSIGNED		8. COUNTRY BANGLADESH
4. DURATION OF FUNDING ☐ CURRENT YEAR ☒ FORWARD FUNDING thru 9/30/75	5. PROJECT NO. AND TITLE 298-11-510-020 Cholera Research Laboratory	9. TYPE ☒ GRANT ☐ LOAN — 10. YEAR FY 19 75

11. FUNDING

	(1) APPROPRIATION NO.	(2) ALLOTMENT NO	(3) PIO/T/OBLIGATION NO.
A. CITATIONS	72- 11X1024	424-62-298-00-69-51	298-020-2-6258306
B. FOR PARTICIPATING AGENCY	(1) INITIAL OR CURRENT $ 350,000	(2) CHANGE (+ OR −)	(3) NEW TOTAL
C. RETAINED BY AID	(1) INITIAL OR CURRENT	(2) CHANGE (+ OR −)	(3) NEW TOTAL
D. TOTAL PROJECT COSTS FOR PARTICIPATING AGENCY ONLY	(1) PRIOR YEARS (FOR CONTINUING PROJECTS) $1,236,936	(2) FUTURE YEAR (INCLUDE CURRENT FUNDING-BLOCKS B(1) OR B(3) $350,000	(3) ESTIMATED TOTAL $1,586,936
E. PRINCIPAL COST COMPONENTS (BLOCK B)	(1) SALARIES, DIFFERENTIAL AND BENEFITS $ 5,940	(2) TRANSPORTATION INCLUDING PER DIEM $ 56,850	(3) MISCELLANEOUS $ 287,210

12. STATEMENT OF PURPOSE

This PASA continues AID support to a long-standing research project aimed at developing effective techniques, with worldwide application, for the prevention and eventual control of cholera, through means of effective cholera vaccines or toxoids.

The principal focus in FY 1975 will be on field trials of a new vaccine. Funding is primarily for personal service contracts for laboratory staff and supplies, materials and equipment.

13. GOVERNING PROVISIONS: PURSUANT TO THE GENERAL AGREEMENT DATED March 3, 1966 BETWEEN AID AND THE DHEW, THE AGENCY NAMED ABOVE AGREES TO PROVIDE THE SERVICES OUTLINED IN BLOCK 12 AMPLIFIED AS NEEDED BY APPENDIX B. UNLESS OTHERWISE AUTHORIZED BY AID, ALL SERVICES SHALL BE OF U.S. ORIGIN. ANY APPENDICES ATTACHED HERETO ARE CONSIDERED PART OF THIS PASA.

14. SIGNATURES

NAME:	[signature]	NAME:	Edward Rawson
TITLE/OFFICE:	Director, OIH	TITLE/OFFICE:	CHIEF, PARTICIPATING AGENCY STAFF CONTRACT MANAGEMENT, AID
DATE:	1/10/75	DATE:	26 DEC 1974

15. APPENDICES

☐ APPENDIX A – BUDGET PLAN
☒ APPENDIX B – SCOPE OF WORK
☐ OTHER (Specify)

16. NEGOTIATING OFFICERS

AID: GM/PAS: VETILGHMAN
AGENCY: HEW/OIH: JRUTKOSKI
HEW/NIH: Dr. C. Miller

Dist 1-29-75

AID 2-2 (1-74)

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BUDGET PLAN APPENDIX A	PARTICIPATING AGENCY SERVICE AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND DEPT. OF HEALTH, EDUCATION, AND WELFARE National Institute of Allergy and Infectious Diseases, NIH, PHS	1. PASA NO. NESA(NA)22-72	2. AMENDMENT NO. 6	3. FISCAL YEAR 1975
PAGE 1 OF 2		4. APPROPRIATION 72-11X1024	5. ALLOTMENT 424-62-248-00-69-51	6. AMOUNT CURRENTLY FUNDED $350,000

7. FUNDED BY	PIO/T-OBLIG. NO.	AMOUNT	PIO/T-OBLIG. NO.	AMOUNT	8. ALLAYED LOCAL SUPPORT PROVIDED BY AID	9. TRUST FUND
	298-020-2-6258306	$350,000				

10. PASA BUDGET PLAN – FUNDING		11. STAFFING			
DESCRIPTION	AMOUNT	NAME AND TITLE	GRADE	PERIOD (MAN-MONTHS)	AMOUNT
A. PERSONNEL COSTS:		Consultants - 7	$100/day	55 days (total)	5,500
SALARIES	5,500				
BENEFITS (8 % OF SALARIES)	440				
DIFFERENTIAL	-				
TRAVEL (EXPLAIN UNDER E)) 1/	41,850				
PER DIEM (EXPLAIN UNDER E))					
MOVEMENT EFFECTS (INTERNATIONAL) (NORMALLY ONLY MOVEMENT TO POST) 2/	15,000				
MOVEMENTS/STORAGE OF EFFECTS (DOMESTIC)	-				
SUB-TOTAL	62,790				
B. OTHER: (SPECIFY IN E BELOW) 3/	287,210				
C. OVERHEAD ☐ SALARIES & BENEFITS -- % ☐ PERSONNEL COSTS ☐ ALL COSTS	-				
D. TOTAL (INCLUDES -- TO BE FUNDED BY FUTURE PASA AMENDMENTS)	350,000				

E. EXPLANATORY COMMENTS

1/ Includes travel and per diem costs for a Scientific Review and Technical Advisory Committee and consultants to the Cholera Research Laboratory; travel and per diem costs of U.S. Government employees and their dependents on assignment to the CRL; and travel and per diem costs of EIS officers from CDC on TDY to the CRL.

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(Continued)

2/ Shipment of household effects, airfreight and POVs of U.S. Government employees from U.S. to Dacca and/or Dacca to U.S.

3/ $ 1,000 - Printing: Research Reports
100,210 - Other Contractual Services: Includes personal Service Contracts and post differential for non-Government Americans to serve as staff members of the CRL/Dacca, travel/per diem costs including their dependents, shipment of HHE/POVs, storage household effects; services at NIH such as procurement, repairing, packing and crating of equipment, materials and supplies for the CRL/Dacca; and such other costs of CRL operations that cannot be paid for in local currency.
100,000 - Supplies and Materials: Includes laboratory, hospital, office, household, automotive, marine and maintenance supplies and materials such as laboratory apparatus, chemicals, glassware, drugs, animal feed, and medical journals and books.
50,000 - Equipment: Laboratory, automotive, marine, field, office and household equipment.
36,000 - Transportation of supplies and equipment from U.S. to Dacca.

APPENDIX B SCOPE OF WORK Page 1 of 3	PARTICIPATING AGENCY SERVICE AGREEMENT Between THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND DEPT. OF HEALTH, EDUCATION AND WELFARE National Institute of Allergy and Infectious Diseases, NIH, PHS	☐ ORIGINAL [x] AMEND NO. 6 PASA No. NESA(HA)22-72 FISCAL YEAR 1975

1. General

Field operations of the project are carried out through the Cholera Research Laboratory (CRL) in Dacca, Bangladesh. Technical supervision and back-up support is furnished through the National Institute of Allergy and Infectious Diseases, National Institutes of Health (NIAID/NIH), which is also responsible for meeting imported equipment and commodity requirements. In addition, the Center for Disease Control (CDC), Atlanta, provides the salary costs of CDC personnel assigned to the CRL on a long-term, as well as short-term, basis.

Other developed nations, such as the United Kingdom and Government of Australia, support CRL program operations through contributions in kind and staff services. Approximately five non-reimbursable employees provided by CDC will have travel, transportation of things, logistic support, and per diem when applicable, paid through the PASA. Salary costs of the supporting staff at NIH, the U.S. costs of research and development studies on cholera toxin/toxoids, the production of toxoids, new vaccines and drugs destined for field trials are provided by NIH at no cost to AID.

In addition to a cash contribution, the Government of Bangladesh provides the CRL with space in the Institute of Public Health in Dacca and the Health Center in Matlab Bazaar, maintenance and repair services at Government expense for space occupied by the CRL, and payment of utility operating costs. The Government of Bangladesh also exempts custom duties for any and all equipment, materials and supplies brought into Bangladesh for the use of the CRL in the furtherance of its activities.

The support provided CRL program operations from non-AID sources in FY 1974 was as follows:

(Continued)

DHEW (NIH and CDC)	$135,329*
Government of the Peoples Republic of Bangladesh	282,666
United Kingdom	26,062
Government of Australia	23,430

2. FY 1975 Work Plan

During FY 1975, the CRL will continue to carry out the basic project objectives, namely, developing, field testing and demonstrating improved techniques and materials for the prevention and eventual control of cholera. In particular, the CRL, under the immediate scientific direction of the NIH, will:

a. Field test toxoids and other vaccines for the prevention of cholera.

b. Evaluate the effectiveness of toxoids/vaccines, and of chemo-prophylactic or chemo-therapeutic drugs in the prevention and treatment of cholera.

c. Develop and demonstrate simplified and less expensive methods for the treatment of cholera.

d. Provide experience to Bengalee personnel in the diagnosis and treatment of cholera.

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*This figure includes:

Center for Disease Control:			
Two EIS Officers assigned in Dacca		$ 58,729	
Three EIS Officers TDY to Dacca		13,354	
			$72,083
National Institutes of Health:			
Secretary 30%	$ 6,140		
Secretary 10%	1,097		
Administrative Officer 20%	2,934		
Cholera Program Officer 70%	16,100		
Two packing and crating persons 40%	17,600	43,871	
One three-ton truck		10,000	
Administrative Costs:			
125 Purchase requests @ $60 =	7,500		
34 Telephone Charge orders @ $45 =	1,530		
23 Stock Requisitions @ $15 =	345	9,375	63,246
			$135,329

(Continued)

3. Special Provisions

a. Reports

(1) An Annual Report of the Director of the CRL.

(2) Minutes or memorandum of meetings held throughout the year.

b. Background Information

Such information and data is available from scientific publications, monographs, and technical reports prepared by CRL staff members, and the technical reports and publications of the Laboratory.

c. Liaison and Contact Officials

(1) Bangladesh: Director of the Cholera Research Laboratory; Director of the AID Mission Dacca.

(2) AID: Coordinator, Cholera Task Force, TA/H, AID/W.

(3) DHEW: Cholera Program Officer, Geographic Medicine Branch, FIAID/NIH.

d. Logistic Support

The Bangladesh Government will provide laboratory and office space, and utilities for CRL program activities. AID and/or the Bangladesh Government will provide housing, utilities, household furniture and equipment, and transportation in Bangladesh.

e. International Travel

International Travel and the transportation of household effects and personally owned automobiles will be undertaken only in accord with AID Travel Regulations.

f. Contracting

NIH and/or the CRL may contract for personal or other services as agreed to by TA/H and OM/PAS in AID.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
WORLDWIDE

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
November 1975

3. Project Number

4. Bureau Code
TAB 6

5. Project Title
A. Enteric disease vaccine.
B A strategy for developing enteric disease vaccines

6. Estimated Initial/Final Obligation
FY 1976 FY -

7. Estimated Cost (Life of Project)
($000 or equivalent. $1=)
AID Approp. 100
Other U.S. ____
Total U.S. 100
Host Govt. ____
Other Donor(s) ____
Total 100

8. Purpose Code
Category Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			100		100	
Total			100		100	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal

Reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)

Prepare a research strategy designed to develop easy to administer vaccines to prevent diarrheal diseases.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature:
Title & Date:

Date Received in AID/W or for AID/W Documents; date of Distribution: 0462

PID

Enteric Disease Vaccine

I. Summary of the Problem and the Proposed Response:

Poor sanitary conditions, absence of adequate supplies of potable water, poor personal hygiene, high infant mortality rates and high rates of morbidity among the general population characterize the poor quality of the lives of the poor majority in less developed countries. A major consequence of these conditions is a heavy burden of diarrheal disease which is transmitted by means of the fecal-oral route through food, water or by direct contact. Diarrhea is a major cause of high infant mortality rates in the LDCs and contributes to poor growth and development of young children. For many years only 20 per cent of diarrhea cases could be attributed to known disease causing microbes although in some studies this percentage has been as high as 30-40 per cent. Recent work has significantly increased scientific knowledge regarding both the microbial causes of diarrhea and the mechanisms by which some of these agents produce diarrhea. Bacteriologists have succeeded in producing avirulent strains of some organisms which have been demonstrated to immunize humans volunteers who have ingested large doses of the organisms by mouth. Advances have also been made in the treatment of diarrhea with fluid by mouth rather than injected intravenously.

1. Project purpose:

This project is to review the state of art with respect to diarrheal disease epidemiology, immunology, etiology, pathogenesis and control,

especially using vaccines, and to develop an Agency strategy for controlling diarrheal diseases.

a. Outputs necessary to achieve purpose:

1. Preparation of manuscripts by authorities on the state of the art on all appropriate aspects of diarrheal disease.

2. Editing, organizing, reproducing and distributing of manuscripts to Blue Ribbon Panel for critical review prior to technical discussions with manuscript authors at a retreat.

3. Correction of manuscripts preparatory to publication of monograph on diarrheal diseases.

4. Preparation by Blue Ribbon Panel of a recommended Agency strategy for research and field projects on diarrheal diseases.

5. Technical review of strategy with Panel followed by submission of recommendations to Director TA/H for decision on implementation.

b. Resources required: (Estimated)

It is expected that about 25 specialists on various aspects of diarrheal diseases will be asked to prepare manuscripts on specific subjects within their areas of expertise.

The Blue Ribbon Panel will include approximately 10 internationally respected scientists to assist in the strategy development.

Other resources required will include a competent staff to organize the project under contract and facilities for the technical review and strategy developing retreat.

c. Estimated Disbursement Period:

One year, FY 1976.

3. Major Assumption:

It is assumed that a sufficient body of knowledge now exists on the causes and immunology of diarrhea and upon immunological features of the diarrheal disease agents that it will be possible to map out a course of action which can lead to the development of easy to use diarrhea preventive measures, especially vaccines.

If the state of the art is not sufficiently well developed to permit development of improved diarrhea control measures, it is assumed that this will become evident and that the Panel will recommend against Agency support of work on this subject until the situation has improved.

4. Host Country Activities:

Not Applicable.

5. Alternatives to the Project:

It is generally recognized that the ultimate solution of the diarrheal disease problem is improvement worldwide in quality and quantity of water supplies, sanitary waste disposal systems, personal hygienic practices, health education and food handling. Achieving such improvements will require many more decades of far greater intensity of effort and annual expenditures of funds than now seem likely will be made. The approach being proposed is intended to provide an interim solution to as much of the problem as possible.

6. Major intended beneficiaries:

Any and all people who suffer from a diarrheal disease for which an improved preventive measure or treatment can be developed. The majority would be the economically and educationally poor in LDCs but others also would benefit.

7. What spread effect is expected?

If this approach to the development of a strategy proves successful it may well be employed again by the Agency but in many respects it is not new since similar courses of action have long been followed by others in health research.

II. Financial Requirements:

Estimated Project Cost: FY 1976 $100,000

Anticipated AID share: 100,000

LDC share: not applicable

III. Development of the Project:

This project actually began with an unsolicited proposal for studies on the enteric diseases which was submitted by the University of Maryland during FY 1973. Although the proposal was to study a number of aspects of the enteric disease, a major component was a field trial of an attenuated living typhoid vaccine which could be administered by mouth. The control vaccine was to be a living attenuated Shigilla flexner 2a also orally administered. The project with modification was approved by RIGC and the RAC approved $75,000 planning money to produce a more detailed project proposal.

Recognizing both the importance and the complexity of the total problem, it subsequently was decided first to undertake the development of a more comprehensive strategy, a decision which has resulted in this project.

Staff time should be adequate to implement this project but the Agency efforts on schistosomiasis have priority.

1. The University of Maryland in preparing the necessary review of the state of the art and strategy development activity have identified subjects which require review, the individuals who should be contributors and those who should comprise the Blue Ribbon Panel of international authorities. A tentative site for the retreat has been selected. Maryland faculty members to be responsible for editing manuscripts and distributing them to Panel members have been designated.

The Agency would assume responsibility for publishing the monograph.

In summary, essential planning has been completed.

2. Schedule to submit:

PP: FY 1976

3. Estimate of additional AID resources needed:

a. Consulting services

None

b. Additional AID staff needed:

None

c. Not applicable

IV. Issues of a Policy or Programmatic Nature:

A. The University of Maryland has a long history of interest in and work upon a wide variety of infectious diseases. It is our impression that they have the nation's largest staff engaged in work on the enteric diseases and undoubtedly have the greatest direct experience in enteric disease vaccine

trials among human volunteers. However, as it is to be expected that subsequent to this project the University of Maryland would desire to submit proposals for implementing the strategy, the question of conflict of interest arises.

B. The Blue Ribbon Panel is expected to advise the Agency concerning a strategy for developing better measures for the control of the diarrheal diseases. Should the arrangements for their participation be made directly by the Agency?

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ Grantee
Kenya/East Africa

2. Document #1 -- PID
Status: New ☒ Revision # ____ ☐
Proposed Next Document:
PP
Proposed Date of Submission:
9/75

3. Project Number

4. Bureau Code

5. Project Title
A. ICIPE Core Support
B Core Support for the International Centre of Insect Physiology and Ecology (ICIPE)

6. Estimated Initial/Final Obligation
FY 76 FY 78

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = ____)
AID Approp. 300
Other U.S. ____
Total U.S. ____
Host Govt. ____
Other Donor(s) ____
Total ____

8. Purpose Code
Category Code

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			100		300	
Total			100		300	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal
To reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)
1. To assist in the development of the ICIPE as a "Centre of Excellence" for Africa for research on medical, veterinary and agricultural entomology.

2. To promote advanced research on insect biology and ecology which will contribute to the solution of problems of insect-borne disease for the countries of Africa.

3. To support the conduct of seminars, symposia, and conferences on medical and veterinary entomology problems of crucial importance to the welfare of man.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: ____
Title & Date: ____

Date Received in AID/W or for AID/W Documents; date of Distribution: 349

PROJECT IDENTIFICATION DOCUMENT

Core Support for the

Centre of Insect Physiology and Ecology

The TA/OST project on Genetic Control of Aedes aegypti Mosquitoes at Mombasa, Kenya has in effect provided some support for ICIPE for several years. However, this project is terminating this year and the Research Advisory Committee at their March meeting recommended that AID consider direct core support for ICIPE in the future.

A TA/H consultant group visited Nairobi recently and will include in their report recommendations as to the merit, nature and extent of support of ICIPE considered advisable.

The governing board of ICIPE is meeting in early June and is expected to make some policy decisions which will greatly influence the nature of future research under ICIPE.

Further development of this project is contingent upon these policy decisions.

Agency for International Development
Project Identification Document Face Sheet

Transaction Code
Add ☐ Delete ☐ Change ☐

1. Country/Regional Entity/ ~~Grantee~~
African Region

2. Document #1 -- PID
Status: New ☒ Revision # _____ ☐
Proposed Next Document: PP
Proposed Date of Submission: Nov. 75

3. Project Number | **4. Bureau Code**

5. Project Title
A. Low Cost Vector Control Methods
B

6. Estimated Initial/Final Obligation
FY 76 FY 78

7. Estimated Cost (Life of Project)
($000 or equivalent. $1 = _____)
AID Approp. 1200
Other U.S. _____
Total U.S. _____
Host Govt. _____
Other Donor(s) _____
Total 1200

8. Purpose Code
Category Code _____

9. Special Concerns Codes

10. AID Appropriated Funds ($000)

Appropriation Symbol	Appropriation Code	Tech. Code	1st Year Grant	1st Year Loan	All Years Grant	All Years Loan
			200		1200	
Total			200		1200	

11. Other U.S.

Program Type	1st Yr	All Yrs
H.I.G.		
PL 480-Title II		
Total		

12. Project Goal

To reduce the adverse impact of the physical environment upon quality of human life by controlling the most critical disease problems of the poor majority.

13. Project Purpose(s)

1. To organize and conduct a research program leading to the development of low-cost, self-help methods of preventing or controlling vector-borne disease.

2. To establish pilot projects to demonstrate the usefulness of known methods of controlling arthropod vectors of human disease.

3. To develop new methods or increase effectiveness of available methods of controlling Anopheles gambiae in adult or larval stages.

14. Planning Resource Requirements (Staff/Funds)

15. Originating Office Clearance
Signature: _____
Title & Date: _____

Date Received in AID/W or for AID/W Documents; date of Distribution: 25

I Summary of Problem to be Addressed

Vector-borne diseases are among the most serious public health problems affecting the rural poor in most developing countries of the world. According to WHO, schistosomiasis affects at least 200 million people, filariasis at least 300 million people, malaria over 200 million people, onchocerciasis affects more than 20 million people in Africa and is a leading cause of blindness in some areas, and trypanosomiasis affects some 35 million people in Africa and if untreated is 100% fatal. All of these diseases are ranked high in priority as health problems in most of the countries of sub-saharan Africa.

WHO is taking the initiative to stimulate research and training on these four diseases plus leishmaniasis and leprosy. However, their approach is a long range one aimed at developing methods for drug treatment and immunization.

There is an urgent need for the development and testing of new methods of vector control and improvement of known methods with appropriate demonstration projects. The proposed project will put emphasis on the development of low-cost, self-help methods of preventing and/or controlling vector-borne diseases.

A consultant team of specialists in vector control has visited Nigeria and Kenya to study the feasibility of developing a project(s) to achieve this objective. Their report will be available early in July and will provide guid for further development of the project.

On the basis of the consultants' preliminary discussions with specialists on African vector control problems in London at the London School of tropical Medicine and Center for Overseas Pest Control and in Geneva with the WHO Malaria and Parasitic Disease and Vector Biology and Control Programs, it is anticipated that the consultants will identify several courses of action. These may include (1) a series of pilot or demonstration projects in one or more African countries utilizing known methods of vector control such as source reduction, basic sanitation, cultural methods, water management, chemical control, and/or biological control; (2) development of a research program on new methods of vector control and/or improving the effectiveness of classical methods; (3) institutional development in terms of a center of excellence with the capacity for planning and conducting the necessary entomological, epidemiological, engineering laboratory and field research.

This project may be implemented through, WHO, an African national institution or through a U.S. or European university. It is anticipated that the consultants' report will cover the various alternatives.

Attachment B

SUMMARY PROGRESS STATEMENT
C. GOING PROJECTS

Project # 867

Project Title Food Waste/Sanitation Cost-Benefit Methodology

Contractor a) University of North Carolina

Sub-Contractor b) Institute of Nutrition for Central America and Panama (INCAP)

I. Implementation Progress*

Outputs	Progress to Date & Relationship to Project Purpose and Goal
a. Publication of Methodology Section I.	Draft completed but requires revision which now scheduled for Sept. 1976.
b. Final revision of Methodology Workshop.	Now scheduled for Sept. 1978. Now scheduled for Dec. 1978.
c. Technical surveys.	Progressing on schedule.

II. Project on Schedule; Life-of-Project Budget Accurate? No.

The project is six months behind schedule because of the delay in completing the potable water supply. Public apathy has been responsible for slow progress in the installation of latrines. Additional funds required = $1,135,218.

III. Significant Change(s) in Project Proposed? Yes.

The nutrient supplementation element is being dropped because of non availability of supplements.

IV. Role of TA Technical Office; Mondays required

Monitoring of this project has proven time consuming. It is estimated that a minimum of 4 man-months will be required.

A new PP must be prepared. Target date June 30, 1975.

Attachment: PAR dated 5/5/75

AID 1020-25 (10-70) REPORT U-448

PAGE 1

PROJECT APPRAISAL REPORT (PAR)

1. PROJECT NO.	2. PAR FOR PERIOD:	3. COUNTRY	4. PAR SERIAL NO.
931-11-510-867	Jan. 1974 TO Jan. 1975	Worldwide	3

5. PROJECT TITLE

Food Waste/Sanitation Cost-Benefit Methodology

6. PROJECT DURATION: Began FY 1971 Ends FY 1977	7. DATE LATEST PROP	8. DATE LATEST PIP	9. DATE PRIOR PAR
	May 23, 1972		

10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: $	b. Current FY Estimated Budget: $ 397,000	c. Estimated Budget to completion After Current FY: $ 797,499

11. KEY ACTION AGENTS (*Contractor, Participating Agency or Voluntary Agency*)

a. NAME	b. CONTRACT, ~~PASA OR VOL. AG.~~ NO.
TA/H	AID/csd-2959
University of North Carolina	
Institute of Nutrition for Central America & Panama	

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X) USAID	AID/W	HOST	B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
	x		1. Revise PROP and extend termination to Dec. 1978.	June 30, 1975
	x		2. Prepare PIO/T for supplemental FY 1975 funding.	May 15, 1975
	x		3. Prepare PIO/T and contract amendments for FY 1976 funding.	Aug. 31, 1975
	x		4. Recruit agricultural economist advisors from TA/AGR.	April 30, 1975
UNC	x	INCAP	5. Delete nutrient supplementation from future planning.	March 31, 1975
UNC			6. Revise budget estimates for a termination date of December 31, 1978.	June 30, 1975
UNC			7. Develop data and programming for thorough, rapid data analysis.	Sept. 30, 1975
UNC			8. Redesign annual report to present a clearer picture of the value of food waste.	Dec. 31, 1975
UNC			9. Study methods for possibly establishing estimates of beans/corn digestibility using available data.	June 30, 1975
UNC			10. Continue latrinization ongoing surveys and health education.	N.A.
		INCAP	11. Complete digestibility study in soldiers.	May 31, 1975
		INCAP	12. Increase frequency of anthropomorphic measurements.	May 31, 1975
UNC		INCAP	13. Improve laboratory quality control.	June 30, 1975
UNC		INCAP	14. Perfect methodology for assessing the economic value of food waste.	June 30, 1975

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D. REPLANNING REQUIRES REVISED OR NEW: [x] PROP [ ] PIP [ ] PRO AG [ ] PIO/T [ ] PIO/C [ ] PIO/P

E. DATE OF MISSION REVIEW

PROJECT MANAGER, TYPED NAME, SIGNED INITIALS AND DATE	~~XXXXXXXXXX~~ DIRECTOR: TYPED NAME, SIGNED INITIALS AND DATE
Joe L. Stockard, M.D. 5/5/75	James E. Banta, M.D., Assoc. Dir., TA/H

III. Standard Questions:

A. Project Inputs:

1. Are key inputs being supplied according to plan?

For the period under review, all of the originally planned inputs have been made as expected except latrines which though in storage have not been accepted by the community. Two new elements were introduced last year, one with, and one without, additional funding. These have not progressed as well as had been hoped. First, was the study to determine digestibility of the traditional beans and corn diet among military personnel who were presemed to be living under sanitary conditions superior to those in the rural communities where the methodology is being tested. INCAP personnel encountered numerous delays with the result that at the time of the evaluation, studies had been completed upon only 10 soldiers. Second, was the incorporation of an assessment of non-work activities with the economic analysis component. This could not be accomplished without additional funds.

It is becoming evident that inputs originally planned for future work will need to be modified though at this time the quantitative amounts of such required modifications cannot be stated precisely.

Some additional staff may be needed for the health education component.

Originally, it was expected that nutrient supplements could be obtained under the Food for Peace Program but the sharp reduction of U.S. surpluses and the disappearance of such commodities from Guatemala necessitates discontinuation both of this input and of this phase of the study.

Data analysis will require more time and funds than originally allowed for this activity.

Funding requirements are increasing. Predominately, these are attributable to two annual salary increases for INCAP personnel which have occurred since January 1974 under PAHO, increased overhead and travel costs.

2. Are assumptions regarding supply of inputs still valid?

The validity of the three input assumptions listed in the PROP has been tested and of these two have proven valid. The field metabolic ward was functioning on schedule and it has been possible to fill all of the key technical positions. One essential technician who died suddenly has been replaced during the last year.

Installation of the completed treated water supply in the test community was delayed about six months. The new supply was originally scheduled to become operational in June 1963 but installation of the distribution system was not completed until September of that year. Failure of the U.S. supplier to provide proper connectors delayed chlorination of the system until January 1974.

The delay in the introduction of health education which resulted from a shortage of funds and which was referred to in the 1974 PAR has proven somewhat advantageous in that time has been allowed to observe the effects of water supply improvement alone.

Assumptions which have not been enunciated previously have significantly altered the situation. Inflation has exceeded expectations. Devaluations of the U.S. dollar have contributed to unexpected salary increases for subcontractor personnel whose salaries come under the

United Nations system. The assumption that final data analysis could be completed in about three months using only the equipment available at INCAP is clearly no longer valid. The computers at INCAP are old and suffer frequent mechanical failures; the volume of relevant data is exceeding our original expectations.

3. Rating of Action Agent's performance against the plan:

Both the contractor's and the subcontractor's performances are judged to be satisfactory. Recruitment, training and assignments of good quality personnel to the field and to base institutions has proceeded in a timely fashion. The screening of about 100 communities was carefully conducted and two villages which were closely comparable in most essential respects was accomplished on schedule. Collection of baseline nutritional, physiological, morbidity and environmental health data has proceeded as planned except for a short period when, because of funding limitations, some surveys were conducted every other month rather than following the planned monthly schedule. The contractor in view of increased inflationary pressure has absorbed some personnel costs in order to provide additional funds needed by the subcontractor to cover increased expenses.

One major problem has concerned the inability of the subcontractor to estimate funding requirements more accurately. However, it is doubtful that at the beginning of this project anyone would have anticipated either the 50% inflationary increases which have occurred in Guatemala since 1972, increased travel costs or the dollar devaluations and two United Nations salary increases, all of which contribute to the large increase in funding requirements.

Other problems have been an over-estimation of the sub-contractor's data analysis capabilities and the as yet unresolved question of the adequacy of laboratory quality control.

B. Transformation of Inputs into Outputs:

1. Are the resources sufficient to produce the predetermined outputs by specified target dates?

One additional person may be required to assist with the education of villagers in sanitary practices and personal hygiene but with this exception the number of personnel now on board both at UNC and at INCAP are judged to be adequate. Fecal nitrogen analyses are proceeding more slowly than we would like but it is doubtful that anything can be done to improve this situation in the near future. The technician who was performing nitrogen analyses died suddenly several months ago and the replacement technician is proceeding cautiously. No additional personnel or supplies will be required for the nutrient supplementation phase of the project, since this element of the originally planned project cannot be undertaken. The unwritten assumption that nutrient supplements would be available under the Food for Peace Program has proven not to be valid.

It has become obvious not only that the data analysis capabilities of INCAP are inadequate to cope with the volume of material being generated by this project but also that a satisfactory analysis of the data using both UNC and INCAP resources will require more time than was expected originally.

One major problem exists in the transformation of inputs into outputs. Present inputs of personnel, supplies and equipment though

adequate generally to achieve the predetermined outputs cannot be maintained without a substantial increase in funding necessitated almost exclusively by inflation and salary increases at INCAP, which comes under the U.N. system.

Target dates until now have been met except for completion of the water supply and installation of the latrines, which have yet to be accepted, in the improved community. The water supply has delayed all subsequent target dates approximately six months. Preparation of Section I of the Methodology originally was planned for February, 1975. The first draft has been completed but needs revision which cannot be accomplished until after the next cycle of metabolic ward studies scheduled for June-November, 1975. This will provide a little over the minimum of 18 months that has been assumed necessary for detecting improvement in intestinal function. The 18 months interval is a major assumption and in the event that such improvement has not become evident it is desirable that at least one additional year be allowed for the detection of physiological improvement. However, it also is clearly evident that health education is needed and this intervention is now being introduced into the improved community.

Necessary increases in the funding inputs currently are estimated as follows:

Funding:

FY 1975	$141,290
FY 1976	218,670
FY 1977	432,150
FY 1978	343,105
	$1,135,215

The contract year will be changed to coincide with calendar years first, because funds obligated thus far in FY 1975 will sustain the project only until December 31, 1975.

This revised budget is based upon a thorough review of project financing conducted by the AID contract representative and project manager in March 1975.

2. Is the approach or course of action originally selected still the most appropriate?

C. Project Outputs:

1. Completed cost-benefit analysis of data from environmentally improved test village and the unaltered control village, and

2. Publication of Section I of the Methodology cost-effectiveness analyses are essential prerequisites for completing Section I of the Methodology manual.

Originally, it was expected that the cost-effectiveness analysis would be completed in December 1974 and Section I of the methodology, February 1975. However, as the contractor is responsible for simplifying the present methodology to the maximum possible extent. Hence, this step will require extensive analyses of data the collection which will not be completed until November 1975 with additional time necessary to complete chemical analyses and the analysis of data. The new target dates for these two output indicators are June 1976 and September 1976, respectively.

3. Stage II, Phase II will be deleted, since nutrient supplement is not available at a reasonable cost but further revision of the methodology

based upon the longer observation period will have a target date of September 1978.

4. Phase III, the workshop, is rescheduled for December 1978 and, as originally planned, will require additional funding.

The technical epidemiological and health survey outputs are routine ongoing activities which do not need special comment since they are progressing satisfactorily.

Action agent's reports to date have been of good quality and have focussed well upon the major areas of interest in the project. The next report will offer the first good opportunity to assess the action agent's ability to present information on the main issue, namely food waste attributable to malabsorption. This requires a passage of time whih when this review was conducted had not been adequate.

Attention is called to the finding that the time honored d-xylose test, which for many years has been so heavily relied upon by clinicians throughout the world as a measure of intestinal malabsorption, correlates only very, very weakly with absorption of real food fats, carboydrates and proteins.

D. Project Purpose:

1. The statement of purpose will need to be revised to delete all references to nutrient supplements both in the PROP and in the contract.

2. The conditions expected at the end of the project as now described will be compatible with the revised statement of purpose.

3. The assumptions remain valid. Many individuals in the two Guatemalan Communities are exceeding the accepted levels of fecal nitrogen and fat excretion which have been established as upper limits of optimum physiological performance on a different type of diet. That the Guatemalan diet differs from those that were employed to establish "normal" parameters is immaterial in this methodological field test because the focus is upon quantifying the reduction of fecal calories, fat and protein which occurs after introduction of sanitary improvements. It, therefore, is still assumed that the observed baseline levels are higher than they could be as a consequence of environmental pollution and that reductions in malabsorption will follow the introduction of a better water supply, improved waste disposal and more attention to hygienic practices.

4. The rationale remains sound despite cancellation of plans to provide nutrient supplements to both communities. Food savings attributable to improved sanitation still can be measured, provided sufficient time is allowed for better physiological performance to become manifest. It will not be possible, however, to assess what benefits might arise from improved nutrition independent of, or synergestic with, improved sanitation. Nevertheless the possible beneficial role of improved sanitation in reducing food waste and thereby improving nutritional efficiency retains its position of paramount importance.

E. Project Goal:

All elements of the project goal remain unchanged since necessary revisions are compatible with the goal as now stated.

IV. Issues Narrative:

The evaluation team included James Banta, TA/H; Joe L. Stockard, TA/H; A. Dale Swisher, SER/ENGR; Jack Keeve, TA/N; Norman Holly, PPC and Frank Consolazio, U.S. Army Bioenergetics Laboratory. Ms. Evelyn McLeod, TA/PM, found it necessary to withdraw from the evaluation team.

One issue raised the previous year remained unresolved. Reference is made to digestibility of the traditional Guatemalan diet which predominately consists of beans and corn. Literature searches have failed to reveal any relevant studies by others over and above those of Darke which have long been in hand. Negotiations with the Guatemalan Army for permission to perform studies on military personnel consummed far more time than expected with the result that, at the time of the evaluation, data were available from only 10 of the planned 20 soldiers. Although only individuals having a normal d-xylose test were included in the digestibility study, fecal nitrogen, fat and calorie excretion by these subjects after ingesting the village test meal were slightly higher than has been observed in the village population. While this is compatible with the hypothesis that beans and corn are relatively indigestible such should not yet be concluded. Only 6 days were allowed for the soldiers to adapt to the rural diet and 4 days for the balance study. It has been recommended by Consolazio that the remaining 10 "normal" soldiers have an adaptation period of 16 to 24 days on the rural diet. If fecal nitrogen excretion still remains high it probably indicates poor digestibility of corn and/or bean protein. (None

of the subjects at Purdue who ate a diet heavy in Opaque-2 corn had fecal nitrogen values above 2 grams per day, the level which is considered to be the upper limit of normal in this project). (However, this is a most unlikely explanation for the observed high excretion on fairly low dietary intakes. The contractor should first try as diplomatically as possible to determine whether in fact these soldiers have been living under superior sanitary conditions for at least 2 years.

The assumption that 18 months following introduction of the potable water supply allows sufficient time to observe improved nutrient absorption cannot yet be accepted or rejected. This interval will end in July 1975 and so the next series of metabolic examinations will have to be completed before any impressions can be obtained concerning the assumptions validity. Considerable attention was given to the question of whether introduction of health education or any other intervention should be deferred until the effect of water supply alone could be assessed. It was the consensus of the majority that although determination of the minimum intervention necessary to reduce morbidity and malabsorption was desirable for planning future projects, the requirement for health education in order to achieve a measurable result in the shortest possible time was so overt that introduction of this component should proceed rapidly. In arriving at this decision, it was recognized that even though the originally planned nutrient supplementation phase could not now be implemented, the project termination date would need to be amended probably to December 1978. Extension of the project to this date should be reconsidered by the evaluation team after

December, 1978. Extension of the project to this date should be reconsidered by the evaluation team after the new digestibility data from ten additional soldiers becomes available but in no case does it appear reasonable to terminate the project earlier than about April 1977.

Testing with d-xylose has contributed very little to the assessment of food waste attributable to intestinal malabsorption. It now is clear that the correlation between absorption of d-xylose and absorption of real food is terribly weak. The principal contribution of the d-xylose test has been to assist in demonstrating that malabsorption in the classical clinical sense does occur in the project area. This test could be discontinued but doing so would result in only very modest savings, less than $1000.00 per year. Consensus of the evaluation is that this element could be dropped if necessary.

The economic component was expanded during 1973 to include data collection on economic aspects which exceeded the original intentions of TA/H. Additional funding was not provided and a separate project concerned with the expanded economic element was disapproved during a subsequent annual program review. Last year the contractor considered it possible to undertake data collection on non-work activities with available funds, but inflationary pressures prevented accomplishment of this plan. The evaluation team concluded that either personnel for the economic component should either be increased in order to accomplish a full economic assess or the present inadequate effort to document work productivity, earnings, leisure time activities etc. should be abandoned. The Director, TA/H has concluded that the expanded economic element should be closed out and the project resume its original focus upon the value of food savings and the reduction in morbidity that can be accomplished by environment improvements.

The high fecal fat values on a modest dietary fat intake have lead to a question of laboratory quality control. Although duplicate specimens are always checked and although the contractor's biochemist has assured himself that the tests are being performed correctly, it was the consensus of the evaluation team that unknowns should be introduced into the system with a check being performed at an independent laboratory.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 995

Project Title Global Cholera Strategy

Grant ~~Contractor~~ a) World Health Organization

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. A global plan with a series of country plans containing an inventory of needs of new or strengthened facilities and services. 2. Identification of institutions which could play a significant role in research programs. 3. Coordination meetings between WHO and donor nations. 4. Special surveys and training programs.	WHO has utilized its Special Cholera account, including $49,000 AID contribution in FY 75 to initiate global cholera planning. A number of field surveys and coordination meetings have been conducted. A plan for a global program for the control of cholera has been produced in more than eight drafts and final program document is in preparation.

II. Project on Schedule; Life-of-Project Budget Accurate?

The pace of this project is determined by WHO and in terms of AID's expectations is approximately one year behind schedule. No further AID participation is anticipated until a final planning document is produced. The budget as shown has been appropriate to meet the needs of the project as expressed by WHO.

III. Significant Change(s) in Project Proposed?

None

IV. Role of TA Technical Office; Mondays required

TA Health has assumed the role of Agency liaison with WHO and project monitor. Manpower: 60 days/year.

Attachment: PAR dated None

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # _____

Project Title Development of Environmentally Acceptable Replacements for DDT.

Contractor a) University of Illinois

b) World Health Organization

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
A. (Univ. of Illinois) 1. Production of candidate compounds in sufficient quantity for testing. 2. Data re biodegradability, persistence, LD-50 for insects available at U. of I. 3. LD-50 data for other insects, available at USDA, CDC, and London School of Tropical Medicine B. (WHO) 1. Central Java Research Sub-Unit, building, staff and equipment. 2. Baseline data on selected test and control villages. (Continued next page)	A1. Already in progress. 2. Dependent upon A1. 3. Dependant upon A1. B1. Being assembled. 2. Studies begun. 3. Dependent upon A and B1 and 2. 4. Dependent upon B3. 5. Dependent upon B4.

II. Project [illegible] Life-of-Project budget [illegible]?

Yes

III. Signi[illegible](s) in [illegible] Proposed?

None

IV. [illegible]

Administrative backstopping at AID/W: 10 days/yr.
On-site inspection and consultation: 20 days/yr.

[illegible]nt: PAR dated N/A

Outputs (Continued)

3. Trial applications of candidate insecticides.
4. Post-treatment data and evaluation of results.
5. WHO Phase V certification.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

Project # 511-552

Project Title Malaria Immunity and Vaccination

Contractor a) University of New Mexico

b) _____

I. Implementation Progress

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Development of a standard parasite-mosquito mouse model. 2. Development of a standard parasite-mosquito-monkey model. 3. Develop practical method for preparation of antigens. 4. Develop a practical method of growing parasites in vitro. 5. Development of a vaccine.	1. Rodent model system perfected. Has served purpose of demonstration of feasibility of stimulating artificial immunity. 2. Rhesus monkey-P. knowlesi model system successfully used. Optimum model system with Aotus monkeys and human malaria now being developed. 3. In vitro preparations of antigens provide an adequate supply for experiments. (Continued)

II. Project on Schedule; Life-of-Project Budget Accurate?
Project is on schedule. Budget meets requirements.

III. Significant Change(s) in Project Proposed?
Project is being restructured in response to RAC recommendations.

IV. Role of TA Technical Office; Mondays required
Approximately 60 man-days per year, however, this represents the time available not the time that should be devoted to the project, but the absolute minimum needs. This project together with the additional related projects being established in a collaborating network as recommended by RAC would require the full time services of one person for the duration of the project in order to provide adequate monitoring.

Attachment: PAR dated PAR scheduled for August 1975.

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Progress to Date & Relationship to Project Purpose and Goal (Cont.)

4. In vitro production of antigens in early stage of development.

5. A lyopholized non-viable partially purified vaccine prepared from the erythrocytic stages of Plasmodium knowlesi is now available for characterization and testing in primates.

6. An in vitro test to measure effectiveness of the antigen is being developed.

Attachment B

SUMMARY PROGRESS STATEMENT
ONGOING PROJECTS

5/5/75

Project # 563

Project Title Lower Cost Methods of Water and Wastewater Treatment

Contractor a) University of Oklahoma

b) _____

I. Implementation Progress

Satisfactory

Outputs	Progress to Date & Relationship to Project Purpose and Goal
1. Bibliography and compilation of materials on water/sewage treatment processes compatible with LDC capabilities. 2. Evaluation of compatible research pilot-scale and plant testing. 3. Preparation and dissemination of reports on results and manuals of procedure. 4. Cooperation with international organizations, lending agencies regional institutes on application of findings.	1. Conceptual work complete; resources and process matricies complete. 2. Nine overseas studies under contract utilization 5 water treatment and 6 sewage treatment processes. 3. Five seminar reports given; users instructions in use by prominent consulting firm; workshop planned for November. 4. WHO, UNEP, OECD, IRC for CWS have affirmed support. IBRD, IDB, PAHO funding Workshop.

II. Project on Schedule; Life-of-Project Budget Accurate?

1. There has been some delay in finalizing sub-contracts with two foreign governments which may delay preparation of final report.
2. Budget considered accurate.

III. Significant Change(s) in Project Proposed?

Monitoring office believes contract should be extended for 18 months. Proposal being considered by RAC.

IV. Role of TA Technical Office; Mondays required

TA/H Monitoring project. Estimated man-days: 25% or 50 days/yr.

Attachment: PAR dated April 17, 1975

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OPTIONAL FORM NO. 10
JULY 1973 EDITION
GSA FPMR (41 CFR) 101-11.6

UNITED STATES GOVERNMENT

Memorandum

TO : See Distribution **DATE:** May 2, 1975

FROM : TA/H, James E. Banta, M.D. James E Banta

SUBJECT: Project Appraisal Report - Research Project "Lower Cost of Water and Waste Treatment in the LDCs"

The Office of Health, TAB, conducted the second annual review and appraisal of the subject project on April 17 and 18, 1975. The PAR (Form 1000-25) including a short narrative section is forwarded to each office and country involved with the project.

TA/H believes that

1. The project is proceeding satisfactorily.

2. That an extension of contractual time is in the interests of AID, and

3. The research findings are likely to provide the Regional Bureaus with opportunities to provide better water and/or sewerage services at considerably less costs.

Enclosures: a/s

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SECOND ANNUAL PROJECT APPRAISAL
Lower Cost Methods of Water and Waste Treatment
in Less Developed Countries
(Contract AID/CM-ta-C-73-13)

The second annual review and appraisal of the above AID research project was held on April 17 and 18, 1975 at the University of Oklahoma, Norman, Oklahoma, under the direction of Dr. James E. Banta, Associate Director, Office of Health, AID. In addition to Dr. Banta the reviewers were:

Dr. Joe Davis, Office of International Health, DHEW.
Mr. A. Dale Swisher, P.E., SER/ENGR acting as Project Manager for AID Office of Health.
Mr. W. Dale Davies, SER/ENGR.

Senior members of the Oklahoma staff associated with project implementation and present were:

Professor George W. Reid, Project Director.
Professor Ralph C. Martin, OU Office Research Administration.
Dr. Larry W. Canter, Director, Civil Engineering and Environmental Sciences.
Dr. Silas Law, Research Associate.
Dr. Richard Discenza, Consultant on Systems Analysis.
Mr. Michael Muiga, Research Assistant.
Ms. Gay Adams, Research Assistant.

The group undertook a thorough evaluation of the project considering its purpose, the resources put into it to date, results obtained, considered possible modifications and established an appropriate course of action for the following year. The group consensus is as follows:

1. Purpose of project

The purpose was originally stated as: to devise and test simplified lower cost approaches to the design and construction of water and/or sewage treatment plants. Implicit in the contractor's approach is the identification of those treatment processes which exhibit maximum capability with in-country manpower and natural resources. The total procedure comprises three steps. First, to develop a system of identifying processes which would be optimal in terms of in-country resources (manpower and materials). Second, conduct several studies at sites which are considered representative of appropriate and successful applications of water and waste systems. These studies will test the soundness of the analytic approach. Third, document and publicize the techniques. The review panel concurred in the objective and approved the general research procedure.

2. Summary of key in-puts

Contractor in-puts to date have been the conceptual and manipulative talents of the Oklahoma University staff; modeling capability, data acquisition and computer facilities; provision of technical manpower; administrative capacity, especially that directed to preparing, culminating and administering sub-contracts; designing and fabricating a simple field test kit sustainable from in-country resources; and travel.

3. Performance of in-puts

AID noted: that campus-based activities have proceeded in accordance with the planned schedule while overseas activities, particularly the on-site collection of data to verify the conceptual matrices, have slipped; that the AID-financed contracts have been supplemented by at least seven collaborative no-cost contracts with international organizations and private firms; that several sub-contracts proffered in November 1974 have not yet been accepted; that development of the test kit is still incomplete; that top level supervision and participation has been largely confined to two men (Professors Reid and Martin) both operating on a one-quarter or less time basis; and suggested that perhaps the University was attempting to accomplish too much with the resources available to it. The University in disagreeing promised as the contractual activities now warrant to intensify travel and control and requested another review o/a Oct. 1, 1975 feeling that such a review was very useful to them.

The University felt that delay in overseas contractual acceptances was attributable in no small degree due to the relatively low level of dollars and time support for projects as well as a lack of expedient action on the part of several foreign governments; they noted that the project has developed into a truly global one with a "snowballing" effect; that at least two of the spin-off effects, i.e., meaningful involvement of several national and international agencies, and the development of investigative competence in participating LDCs, were activities critical to AID's overall goals. To strengthen the field testing in a realistic time frame; to permit coordination of collaborative in-puts; to conduct the pre-planned technical workshop; to document and disseminate all data through regional conferences will require time not presently within contract limitations. The University requested AID approve an eighteen month extension and funding to the present contract.

4. Progress toward out-puts

In the 24 months that this project has been operational the detailed system for selecting optimal treatment processes for in-country resources has been completed. The resources model with a user's manual has been compiled, computerized, is operational and ready for testing;

process matricies are completed; and data formatting is completed and has been communicated to the World Health Organization International Reference Center for incorporating into a study to locate innovative technology in LDCs. Nine in-depth studies are now under contract at 10 globally-dispersed sites, utilizing 5 water treatment studies and 6 waste water disposal processes. Seven collaborative studies are being conducted at no cost to this project. In addition, a field test kit is being developed; five seminar presentations have been made to national and international organizations and two are planned for delivery later this year (IWR, AIDIS, ASCE, US-Mexico, AWWA, etc.); international agencies are interested (WHO has affirmed its support, UNEP, OECD and IDRC have indicated desire to cooperate); and a survey of innovative techniques is being undertaken by the Government of Holland; and State of the Art Documents on water and sewage treatment in LDCs are under preparation.

5. Revisions needed

The review team recommends the following revisions:

A. In-puts

1. AID should support the proposed eighteen month extension at a forthcoming RAC meeting and subject to their approval should provide the additional time and funding.

2. AID should convene the same review team to conduct a special progress review about October 1, 1975.

3. OU should intensify travel and sub-contract surveillance.

B. Out-put targets

1. OU should concentrate attention on technology that is compatible with in-country capabilities rather than on "newer" technology. This would restate but not change the original out-put goal.

2. Benefits of the project should be directed to smaller aggregations of people (say 500 to 100,000 people) rather than to major urban centers. This intention is already being followed and the change is merely one of clarity.

C. Purpose

No revisions are recommended.

AID 1020-25 (10-70) REPORT U-446

PROJECT APPRAISAL REPORT (PAR)

PAGE 1

1. PROJECT NO.	2. PAR FOR PERIOD:	3. COUNTRY	4. PAR SERIAL NO.
563	March 74 TO March 75	Worldwide	2

5. PROJECT TITLE

Research in Lower Cost Methods of Water and Waste Treatment in Less Developed Countries

6. PROJECT DURATION: Began FY 73 Ends FY 76	7. DATE LATEST PROP	8. DATE LATEST PIP	9. DATE PRIOR PAR
	Aug. 9, 1972	N.A.	March 11, 1974

10. U.S. FUNDING	a. Cumulative Obligation Thru Prior FY: $ 148	b. Current FY Estimated Budget: $ 121	c. Estimated Budget to completion After Current FY: $ 0

11. KEY ACTION AGENTS (Contractor, Participating Agency or Voluntary Agency)

a. NAME	b. CONTRACT [illegible] NO.
Oklahoma University, Norman, Oklahoma	AID/CM-ta-C-73-13

I. NEW ACTIONS PROPOSED AND REQUESTED AS A RESULT OF THIS EVALUATION

A. ACTION (X) USAID	AID/W	HOST	B. LIST OF ACTIONS	C. PROPOSED ACTION COMPLETION DATE
		x	1. Submit 2nd Annual Report to AID/W.	June 2, 1975
		x	2. Submit signed copies of all sub-contracts to be undertaken under presently approved financing.	June 2
		x	3. Perform site inspections of sub-contractual work in Peru, Brazil, Ecuador (Dr. Discenza).	July 15
		x	4. Visit Colombia and Trinidad and determine if contracts are to be undertaken (Prof. Reid).	July 15
	x		5. Secure RAC approval of proposed extension; issue PIO/T.	Aug. 1
	x		6. Place program on AID-WHO Coordination Meeting agenda; ascertain scope and degree of WHO collaboration.	Aug. 1
		x	7. Perform site visits Near East-Africa (Mr. Martin?).	Aug. 15
			8. Consummate all sub-contracts (including those in Contract extension).	Sept. 1
	x 2	x 1	9. Perform site visits - East Asia (Prof. Reid)	Sept. 1
	x 1	x 2	10. Semi-annual review and evaluation of overall progress.	Oct. 1
		x	11. On-site review of PAHO/CEPIS contract	Nov. 15
	x 2	x 1	12. Conduct worldwide Technical Workshop (Holland)	Nov. 23
	x 1	x 2	13. Third annual review (PAR)	April, 1976

D. REPLANNING REQUIRES REVISED OR NEW: ☐ PROP ☐ FIP ☐ PRO AG ☒ PIO/T ☐ PIO/C ☐ PIO/P

E. DATE OF MISSION REVIEW: April 17-18, 1975

PROJECT MANAGER: TYPED NAME, SIGNED INITIALS AND DATE
A. Dale Swisher, P.E. 4-22-75

APPROVED BY: TYPED NAME, SIGNED INITIALS AND DATE
James E. Banta, M.D., Assoc.Dir., TA/H

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SMALL ACTIVITIES REQUIREMENTS

Vector-Borne Disease Control

FY 76

1.	New Concepts in Mosquito Control (R & D)	$ 25,000
2.	Sustained-release Formulations (R & D)	25,000
3.	Biological Control of Vectors (R & D)	25,000
4.	Working Conference on Malaria Vaccine	25,000
5.	Seminar on Chagas Disease (Grant to WHO)	25,000
6.	Vector Control Training (Grant to PAHO)	25,000
		$150,000

JUN 3 1975

SMALL ACTIVITY REQUIREMENTS

($150,000)

KPA 13: Vector-Borne Disease Control

Funding Requirements
FY 76 $25,000

Project: Small R and D project:
New Concepts in Mosquito Control

Resistance developed by insect vectors of human diseases to DDT and other residual insecticides has resulted in a shift from the standard malaria eradication program practices of house spraying to kill infected adult vectors, to attempts to control the size of total vector populations. This is accomplished more economically by attacking concentrated larval populations at the source than by area coverage to control adult vectors once they have dispersed. Because the insecticides of choice are short-lived, such operations require repeated applications in order to kill each new generation as it emerges.

Bend Research, Inc. has developed a process of micro-encapsulation utilizing materials of varying osmotic permeability. In theory, a chemical contained in a mixture of such micro-capsules could be released with a predetermined periodicity. Thus a single application of such a mixture of micro-encapsulated larvacide could control succeeding generations of vectors without maintaining a high level of toxicity in the water between treatments, at greatly reduced labor and logistics costs.

The proposal is to design such a system utilizing several standard larvacides, and to test this periodic release effect. Work will be carried out at the contractor's laboratories in Bend, Oregon. Quarterly progress reports would be required, as well as a final report and/or publication of results in professional journals. Monitoring would require two or three trips to the contractor's laboratories.

At this point involvement of Regional Bureaus, Missions, LDCs, etc. is not anticipated. Promising compounds might be manufactured in quantity and tested under field conditions with cooperation of such agencies under a separate project at a later date.

KPA 13: Vector-Borne Disease Control

Funding Requirements
FY 76 $25,000

Project: Small R and D Project:
Sustained-Release Formulations

Under most circumstances, application of such residual-action insecticides as DDT to interior walls of dwellings is the method of choice for malaria control/eradication programs because of relatively low material and logistic costs and because of the restriction of such attack to potentially infected vectors. However, development of resistence to DDT by the vectors, as well as scarcity and increasing cost of this insecticide is forcing a switch to other chemicals of shorter residual life, with a resultant increase in logistic costs to cover more frequent applications.

The University of Oregon at Corvallis has been working on a method of formulating standard insecticides with polymers to produce a material which, when applied, would release the toxic ingredients slowly over an extended period of time while protecting the as-yet-unreleased portion from the degrading action of the atmosphere.

The proposal is to test a series of such formulations for toxic effect on malaria vectors over measured periods of time.

KPA 13: Vector-Borne Disease Control

Funding Requirements
FY 76 - $25,000

Project: Small R & D Project:
Biological Control of Vectors

Rising cost and decreasing supplies of petroleum-based insecticides, as well as environmental factors emphasize the potential importance of the biological approach to vector control. To date the short period during the aquatic life of mosquitoes during which growth-regulating hormones are effective, and the difficulty of maintaining bacterial cultures in vector sources between hatches, have severely limited the utility of these approaches to the problem.

The proposed contractor has had some success, in the laboratory, with extending the available life of such agents by micro-encapsulation and by combining them in varying proportions with each other and with chemical insecticides. $50,000 has been offered by the Center for Integrated Pest Control, Hebrew University, Rehovot, Israel to fund field trials of this method in that country.

AID has been requested to provide an additional $25,000 to cover the cost of production by the University of California of various micro-encapsulated combinations of these materials in sufficient quantity for the field trials.

KPA 13

Funding Requirements
FY 76 $ 25,000

Project: Working Conference on Malaria Vaccine
No. of Participants: 25
Time: October 1975

There is a requirement for laboratory scientists involved in developing the malaria vaccine to have the opportunity for creative communication. A working conference at which the scientists can exchange ideas, seek critical evaluation of ongoing work, find stimulation, and generate new ideas and experiments, is a necessary requirement if we are to have a malaria vaccine developed in a timely manner. It is in the interest of TA/H to encourage and support this kind of communication on an ongoing basis. In effect, this is the development of a working network (recommended by RAC) addressed to solving the problem of malaria by means of immunization. The approximately 25 participants in the proposed four-day meeting would include the Principal Investigator and key staff of the six research projects on malaria immunity and vaccination supported by AID, plus other senior researchers in the field, to a maximum number of twenty-five.

KPA: Vector-Borne Disease Control

Funding Requirements
FY 76 $25,000

Project: Seminar on Chaga's Disease
(Grant to WHO)

Chagas, a not usually immediately fatal, but chronic and debilitating disease is a trypanasome infection transmitted by Triatomid insects which typically live in the cracks and crevices of the walls of poorer class housing. Its seriousness has long been recognized in some parts of Latin America but its extent is only now being measured. Some urban areas have had control programs against this vector, but these have for the most part been applied without much study of the basic problem, or effective evaluation of results. It has been theorized that malaria eradication program residual spraying operations have also controlled the Chagas vector in rural areas, but with the development of resistance to DDT and the cessation of these operations, a resurgence of Chagas is anticipated.

Three years ago WHO established a Chagas research station (CDVRU) in rural Venezuela and has been performing basic research in identifying the vectors and animal reservoirs and studying their ecology, life cycles, and habits.

The proposal which AID has been asked to partially fund is for a seminar attended by CDVRU staff, other Chagas authorities, and representatives of the Ministries of Health of the countries believed to be at risk. The purpose would be to consolidate what is known of the prevalence, extent, and importance of the disease, present and discuss the CDVRU findings to date, encourage and coordinate intensified epidemiological studies by the various Ministries of Health, and discuss control operations incorporating the new knowledge provided by CDVRU.

The seminar is planned for early in CY 76, at PAHO headquarters in Washington. The requested grant would cover travel and per diem expenses of participants and reproduction of reports. WHO would organize the meeting, issue invitations, etc., and PAHO would supply the meeting place with simultaneous translation as required.

KPA: Vector-Borne Disease Control

Funding Requirements
FY 76 $25,000

Project: Vector Control Training
(Grant to PAHO)

With the loss of effectiveness of the residual insecticides upon which it is based, the standard concept of malaria eradication is no longer feasible in many countries in the immediate future. As a result, and as officially recognized by WHO at the 1969 World Health Assembly, it is now necessary to attempt to maintain the malaria rates at a low level by controlling vector populations until such time as a technological breakthrough (such as a vaccine against malaria) or a general rise in living standards, epidemiological efficiency and availability of medical care, (such as now exists in the U.S.) reduces or eliminates the danger of epidemics.

Unfortunately, the majority of the world's malaria eradication program professionals have little or no training or experience in vector control. PAHO's proposal is for a one-time training session for the professional staffs of the malaria programs of Latin America on whom this new responsibility is now falling. As envisioned, such a course would be divided in two parts. The first would be a short lecture series on theory and basic fundamentals, held in one of the Latin American countries where typical vector sources and socio-economic factors of the area could be demonstrated. The second section would be a tour of a number of operating mosquito abatement districts in the U.S. where organization, source reduction, larvaciding and adulticiding methods have been brought to a high degree of efficiency.

The AID grant would cover transportation and per diem costs of participants and instructors. PAHO would provide simultaneous translation where necessary, reproduction of course material, and, in cooperation with the country involved, a meeting place for the first section of the program. Various U.S. mosquito abatement districts would provide personnel, equipment, and materials for on-site demonstrations of methodology.