

UNCLASSIFIED

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION  
AGENCY

AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

PROJECT PAPER

YEMEN ARAB REPUBLIC: TIHAMA PRIMARY HEALTH CARE  
AMENDMENT NO. 1

AUGUST 1982

<b>AGENCY FOR INTERNATIONAL DEVELOPMENT</b> <b>PROJECT DATA SHEET</b>		<b>1. TRANSACTION CODE</b> <input type="checkbox"/> A = Add <input checked="" type="checkbox"/> C = Change <input type="checkbox"/> D = Delete	<b>Amendment Number</b> 1	<b>DOCUMENT CODE</b> 3
<b>2. COUNTRY/ENTITY</b> YEMEN ARAB REPUBLIC		<b>3. PROJECT NUMBER</b> 279-0065		
<b>4. BUREAU/OFFICE</b> Near East		<b>5. PROJECT TITLE (maximum 40 characters)</b> Tihama Primary Health Care		
<b>6. PROJECT ASSISTANCE COMPLETION DATE (PACD)</b> MM DD YY 06/30/87		<b>7. ESTIMATED DATE OF OBLIGATION</b> (Under "B." below, enter 1, 2, 3, or 4) A. Initial FY 80 B. Quarter 2 C. Final FY 87		

**8. COSTS (\$000 OR EQUIVALENT \$1 = )**

A. FUNDING SOURCE	FIRST FY 80			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	1,100		1,100	11,500		11,500
(Grant)	( 1,100 )	( )	( 1,100 )	( 11,500 )	( )	( 11,500 )
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S.						
Host Country		2,239			12,009	12,009
Other Donor(s) UNICEF/UNDP	2,219		2,219	2,219		2,219
<b>TOTALS</b>	<b>3,319</b>	<b>2,239</b>	<b>3,319</b>	<b>13,719</b>	<b>12,009</b>	<b>25,728</b>

**9. SCHEDULE OF AID FUNDING (\$000)**

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) Hlth	B533	510		2,200		500		11,500	
(2)									
(3)									
(4)									
<b>TOTALS</b>				<b>2,200</b>		<b>500</b>		<b>11,500</b>	

<b>10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)</b>	<b>11. SECONDARY PURPOSE CODE</b>
<b>12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)</b>	
A. Code	
B. Amount	

**13. PROJECT PURPOSE (maximum 480 characters)**

To support the development of primary health care services in the Tihama region of the Yemen Arab Republic according to the Basic Health Services plan developed by the Ministry of Health and the World Health Organization.

<b>14. SCHEDULED EVALUATIONS</b> Interim MM YY 02/84 MM YY 02/86 Final MM YY 05/87	<b>15. SOURCE/ORIGIN OF GOODS AND SERVICES</b> <input type="checkbox"/> 000 <input checked="" type="checkbox"/> 941 <input type="checkbox"/> Local <input checked="" type="checkbox"/> Other (Specify) 899 vehicle
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**16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a \_\_\_\_\_ page PP Amendment.)**

Extension of PACD date by 2 years.  
 Reduction of U.S. Technical Assistance  
 Addition of health survey activities and health education/media component.  
 Refinement of the focus and objectives of the training programs.

<b>17. APPROVED BY</b>	Signature Robert W. Beckman	<b>18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION</b> MM DD YY 07/01/82
	Title Acting Director	

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C. 20523

ASSISTANT  
ADMINISTRATOR

FIRST AMENDMENT  
TO  
PROJECT AUTHORIZATION

Name of Country: Yemen Arab Republic      Name of Project: Tihama Primary Health Care  
Number of Project: 279-0065

1. Pursuant to Part I, Section 104(c) of the Foreign Assistance Act of 1961, as amended, the Tihama Primary Health Care Project (the "Project") was authorized on January 15, 1980. That authorization is hereby amended as follows:

a. In paragraph 1, the phrase "six-year period" is deleted and the phrase "seven-year period" is substituted therefor.

b. Paragraph 3 of the authorization is hereby deleted.

c. In paragraph 4, the phrase "The grant agreements" shall be replaced by the phrase "The grant agreement".

d. Paragraph 4.a. ("Initial disbursement") is hereby deleted and replaced with the following:

"Covenants". The Yemen Arab Republic shall covenant that it will submit to A.I.D. an implementation plan acceptable to A.I.D. by a date to be agreed upon by the Yemen Arab Republic and A.I.D."

e. Paragraph 4.b. ("Disbursement for Revolving Fund") is hereby deleted, and paragraph 4.c. ("Source and Origin of Goods and Services") is hereby renumbered as paragraph 4.b.

2. Procurement of six vehicles, for an amount not to exceed \$60,000, from Geographic Code 899, is hereby authorized. The interests of the United States are best served by permitting procurement from Free World Countries other than the cooperating country and countries included in Geographic Code 941.

3. The authorization cited above remains in force except as hereby amended.



W. Antoinette Ford  
Assistant Administrator  
Bureau for Near East

**20 AUG 1982**

Date

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I. EXECUTIVE SUMMARY

This project was approved in FY80 for six years with a Life of Project cost of \$11.5 million. A three year OPG for \$5.6 million was approved to implement the project. The PVO was unable to implement the project in accordance with MOH guidelines and after 2 years, the MOH indicated that a change of leadership was necessary.

An evaluation at the end of the second year of program activity revealed serious organizational and administrative problems, and the evaluation team determined that a further investment of AID funds would not produce results which would be commensurate with the investment. The evaluation team concluded that the basic design of the project was still technically sound, and it would be feasible to continue the project with a shift in focus and some changes in project activities.

The project will continue with its original purpose which is to support the development of primary health care services in the Tihama region of the Yemen Arab Republic according to the Basic Health Services plan developed by the Ministry of Health and the World Health Organization.

The amendment will shift the major areas of project activity to emphasize the refinement and expansion of the primary health care system which the MOH, with the grantee, began to establish in the Tihama. The planning, management, and administration of the primary health care services will be strengthened under the amendment, training programs will be reviewed and refined, the baseline survey will be redesigned, and major efforts in the design of mass media health information/education programs will be added to the project.

The amendment will reduce the long term technical assistance team to two advisors, in training and management and short term technical assistance in media design. A third long term technical advisor will work on health surveys for approximately 2 years. Additional short term technical assistance will include health facilities design, curriculum development, and various aspects of health management and administration. Participant training, a limited amount of media production equipment, and six vehicles will also be included. The project will be extended by 2 years to FY87.

## II BACKGROUND AND DETAILED PROJECT DESCRIPTION

### A. BACKGROUND

The Tihama Primary Health Care project was originally conceived as a response to the MOH plan for Basic Health Services which had been developed by the MOH and WHO in 1978. The Tihama region where the project was to be implemented is one of the poorest regions in Yemen. A description of the region's health problems and living conditions was presented in the original project documents. The project was to be implemented through an Operational Program Grant (OPG) with a PVO already in-country.

The original Project Authorization was for a six year project with a Life of Project Cost of \$11.5 million. The project was approved at this level, but an OPG for three years (\$5.6 million in AID funds) was written, with the additional three years to be added if an evaluation at the end of the third year indicated satisfactory progress toward the achievement of project goals. The three year OPG included approximately 60 person/years of long term technical assistance, 112 person/months of short term technical assistance, vehicles, supplies and equipment, a substantial amount of participant training (24 person years long term training, plus short term training, workshops and seminars), and a revolving loan fund which was to be used to stimulate Local Development Association support of primary health care activities.

During the period of project review and approval, the Ministry of Health was moving rapidly toward nationwide implementation of the Basic Health Services Plan. A new MOH Director of Basic Health Services was appointed and, in cooperation with UNICEF, a program for the national implementation of BHS was designed. The UNICEF project included construction of primary health care units throughout the country, provision of drug supplies and clinic equipment, vehicles for all of the non-governmental organizations. The AID grantee, which had been the first NGO to develop a project according to the BHS plan, was now one of several NGO's which were to implement the plan according to guidelines established at the national level by the MOH Director of Basic Health Services.

The implementing PVO was never fully able to revise the project it had designed to conform fully to the MOH guidelines developed after the PVO design. This led to many problems: Primary health care workers (PHCW's) were recruited from villages not included in the MOH plan; decisions were made without full participation by the YAR; MOH training plans were not adhered to. In addition, an evaluation after ten months of implementation showed that many positions had not yet been filled; not all personnel were fully qualified for their jobs; management and administrative tasks necessary for implementation had not been adequately performed, and project outputs had been greatly over-estimated. In an effort to improve the situation, the MOH requested with USAID's concurrence that the project administrator be replaced; that the implementation plan be revised to reflect reduced outputs and MOH policies; that a new operating budget be prepared, and; that reports be submitted on several studies which were behind schedule (drug supply system and baseline surveys).

During the second project year a new administrator was hired, whose main experience was in health education. Administration, management and leadership remained weak. Six PHCW's were trained and five were placed in their units. The PVO and the MOH continued to have communication problems and failed to arrive at a mutual agreement on respective obligations in implementation.

Meanwhile, implementation continued to falter. An inadequate workplan was submitted, failing to identify costs or responsibilities for implementation activities. An operating budget was not submitted until April 1982 (for CY 1982) and this budget did not project MOH costs as requested. Detailed repayment plans and controls for the revolving fund were not established (although this remains to be analyzed by an audit). The MOH expressed to USAID a serious lack of confidence that the grantee could meet its goals. This was based on a comparison of other donors working with fewer resources and having much higher success.

AID made the decision in May to suspend the existing OPG since it was clear that further AID investments would not produce results justifying the cost. However, since the basic MOH primary health care project still appeared worthwhile, this amendment has been drafted to allow basic project activities to continue and a contractor to be recruited. This amendment reflects a technical analysis by the evaluation team and a redesign based on extensive discussion with the MOH in Hodeida and Sana'a regarding the current needs of the MOH.

## B. PROJECT DESCRIPTION

The project will continue with its original purpose which is to support the development of primary health care services in the Tihama region of the Yemen Arab Republic according to the Basic Health Services plan developed by the MOH and WHO.

The amendment will shift the major areas of project activity to emphasize the refinement and expansion of the primary health care system which the MOH, with PVO assistance, began to establish in the Tihama. The Planning, management, and administration of the primary health care services will be strengthened under the amendment, training programs will be reviewed and refined, the baseline survey will be redesigned, and major efforts in the design of mass media health information/education programs will be added to the project.

The Ministry of Health has indicated that a comprehensive survey of existing health sector resources in the project area (including equipment) will be undertaken prior to the development of further plans for the implementation of the basic health services project in the Tihama region. This survey is expected to provide an excellent opportunity for a thorough review of current health sector programs, by the new long term technical assistance personnel (management/financial specialist), and to lead to the identification of management and administrative issues which need to be addressed as the basic health services program expands further into the Tihama..

The Ministry expects to develop a list of areas which are ready for the next phase of expansion of basic health services, and a list of those which will follow. Standard criteria will be used to establish priorities (e.g., population to be served, status of existing services).

Assistance to the Ministry will include participation in the survey, development of standard administrative procedures; logistic support systems including drugs, medical supplies, and equipment, cost accounting and control systems, and further development of the transportation and vehicle maintenance system.

The training and supervision of health care providers at all levels of the health system remains an area which needs further attention. A long term TA training specialist will be expected to provide support to the MOH in the form of a comprehensive review of current training activities in the Tihama project area, identification of areas in need of improvement (both specific topics within the curricula and procedures such as skills testing), development of in service training for both certified and uncertified (experienced) health workers, identification of needs for seminars, workshops, for all levels of health care providers. The MOH has indicated that there is also a need for MOH personnel at all levels of the system to be informed of the purpose and goals of the basic health services project and the role of the primary health care worker in the community. A series of activities which will meet this need will also be developed.

The training specialist will also develop as part of the training curricula, lessons for LBA's, PHCW's and trainer-supervisors in family planning.

The relationship of the community, the Local Development Association, and the formal and informal health systems needs further exploration in order to identify the most effective ways to involve the villagers and LDA's in the improvement of health status in their communities. The management specialist and training specialist will be expected to work together with the MOH to identify short term technical assistance needs in this area, and to promote the coordination of community health activities with other community and LDA efforts.

The community baseline survey which was included in the original project will be redesigned and the sample increased to provide more detailed and more statistically valid information regarding health status, health problems and practices, and the use of various health care providers to resolve health problems. A survey specialist will work with the MOH for 1½ years long term in the initial redesign, testing and implementation of the survey. Intermittent short term technical assistance will be provided thereafter to revise the survey as needed and to develop ways to use repeat surveys to monitor changes in health status, health practices, and the utilization of various health care providers. This survey will be coordinated with the Tihama Development Authority which is particularly interested in exploring nutritional status in the Tihama.

The widespread use of television and radios in Yemen and the commitment of the media to the health education efforts of the MOH will be further exploited through the development of health education messages for the mass media. The use of the media is expected to include messages which will inform the public of the role of the primary health care worker in their community, and specific messages on a variety of health problems and practices (e.g. garbage disposal, immunizations, washing hands, excreta disposal, malaria, nutrition, etc.)

A media specialist will be identified to work with the project on short term but continuing basis over the life of the project to assist the MOH and the local media with the design and production of health messages for the mass media. The media specialist will assist the Yemeni media personnel to identify short term and long term training needs which will enable them to expand their own production activities. It is expected that initially it will be necessary to design and produce health education messages through the use of U.S. based production facilities and to use training and technical assistance to gradually increase the capability of Yemeni media personnel to design and produce their own health education messages. The media specialist will also assist in the identification and development of educational materials to assist LBA's and PHCW's in promoting awareness of family planning in villages.

Short term technical assistance, in addition to the previously described, will be provided in location analysis and design of health facilities, various aspects of mass media health education programming, curriculum development and other aspects of training activities. All short term technical assistance will be discussed fully with the MOH-Hodeidah and the MOH-Sana'a Basic Health Services Office in order to ensure MOH understanding of and concurrence with the need for short term technical assistance and to avoid overlap or repetition of assistance which is already being provided through another donor.

A participant training plan will be developed after the health resources survey has provided information regarding personnel needs in the Tihama project—area. Long term, short term, U.S., in-country and third country training sources will be used. Efforts will be made to build on the experience of other donors in the identification of training resources which are appropriate for Yemeni health personnel.

The amendment to the Tihama Primary Health Care project does not alter the CDSS commitment to support health sector development through this project. It responds to the CDSS emphasis on the improvement of conditions in the poorest rural areas of Yemen, which include Hodeida governorate.

The Tihama Primary Health Care Project is part of the MOH plan for Basic Health Services which was incorporated into the First Five Year Plan (1976/77 to 1980/81). The MOH commitment to the plan for Basic Health Services reflects the YARG commitment to free health services for the entire population. The project amendment further reflects the need for technical assistance and the development of human resources in the health sector, rather than large investments in infrastructure development.

## II. C. OTHER DONORS

UNICEF is the donor most actively involved in the implementation of the Basic Health Services Plan. UNICEF is contributing drugs, clinic supplies and equipment, construction of primary health care units, vehicles, technical assistance in planning and monitoring, and coordinating the primary health care projects throughout the country.

WHO has been providing technical assistance, training and health service development assistance to Yemen since 1969. WHO advisors assisted the MOH in the preparation of the first National Health Plan and the Plan for Basic Health Services. WHO's Expanded Program for Immunizations provides trained vaccinators throughout Yemen, including Hodeidah and Zaydah health centers. The EPI vaccinators travel to villages with the primary health care worker supervision teams. The primary health care workers are responsible for the identification of children who need vaccinations which are provided by the EPI vaccinator during the weekly supervision visit. WHO's malaria advisor has provided a great deal of informal assistance to the project laboratory technician in the diagnosis of malaria. A WHO microscope is on loan to the Zaydah laboratory.

The World Bank has recently appraised a health project which is expected to begin in January 1983. While the primary activities of the project consist of assistance to key areas of the Central Ministry of Health and the Health Manpower Institute, there are several major contributions to Hodeidah governorate. These include construction of dormitory facilities (for men and women) and classrooms for the Hodeidah Health Manpower Institute, equipment of health education and nutrition units in health centers, a drug warehouse, and a vehicle maintenance and repair workshop. A number of vehicles will be provided for use in the distribution of drugs and other supplies.

The Swedish Save The Children project has provided health care services in Yemen for over twenty years. In the Hodeidah governorate, the Swedish project is implementing the basic health services plan from Zabid and Beit el Faqih. The Tihama Primary Health Care project area begins north of Beit el Faqih. Cooperation and coordination with the Swedish project has been limited to date but the long experience of the now entirely Yemeni staff in Zabid represents an important resource for the Tihama project staff.

### III PROJECT IMPLEMENTATION AND EVALUATION

#### A. PROJECT IMPLEMENTATION SCHEDULE

Major events required for implementation of the project from the time of submitting this Project Paper Amendment are set out in Table I. (While this schedule does not include past implementation actions for the AID-grant financed project, it does include all actions believed to be required from the present to complete all aspects of the AID project, regardless of funding source.) It is believed that there is a high probability of achieving full project implementation within the PACD of June 30, 1987.

#### B. PROJECT MONITORING AND EVALUATION

AID monitoring and implementation responsibilities will be carried out by the USAID/Yemen Health Officer. The MOH has requested that this person maintain close liaison between the MOH and USAID-Yemen regarding progress and problems in project implementation. This will require close contact with contractor personnel and frequent visits, discussions, and field trips to observe implementation conditions and activities.

Comprehensive program reviews will be carried out annually, beginning approximately one year after the contractor's long term technical assistance team arrives in Yemen. Quarterly Contractor reports will be available for the evaluators. (These reports will be submitted to the MOH (Hodeidah and Sana'a), USAID, AID/W, SER/CM, and NE/TECH/HPN.) Table I includes a schedule for submission of annual reports and for annual reviews and final evaluations.

The project's Logical Framework and matrix of project monitoring and evaluation activities show the verifiable indicators of attainment of the inputs, outputs and end of project status; these indicators will be used in project monitoring and evaluations, measured against dated quantitative targets which will be specified, subject to AID and MOH approval, in the contractor's work plan.

Two comprehensive evaluations, one carried out two years after the contractor long term team's arrival in Yemen and the other carried out near the end of AID-supported project activities in 1987, will be "special" evaluations with participation of outside evaluators. The latter (1987) evaluation, to the extent feasible, will be impact-focused, with particular emphasis on comparisons of baseline data with information system outputs and the results of special follow-up comparison surveys. All the required surveys will be carried out as part of the project.

Participants in the regular annual evaluations will include the USAID/Yemen

Health Officer and the AID-Washington project officer, plus TDY specialists if required by the project's situation at the time of the evaluation.

The outside participants in the two "special" evaluations are expected to include a primary health care expert, a specialist in management support systems for rural health programs, and a specialist in health status surveys and evaluation.

#### C. PROPOSED GRANT TERMS AND NEGOTIATING STATUS

As of June 1982, \$2.2 million has been obligated through an Operational Program Grant. For the remainder of the project, USAID will negotiate a Grant Agreement with the YARG. The Ministry of Health will have prime responsibility for implementation with assistance from a U.S. contractor. The contract will be negotiated as a direct AID contract.

MOH officials in Hodeidah and Sana'a have been fully briefed on the terms of the project, reviewed the project description and budget, and have indicated understanding and concurrence in them.

The following Special Covenants are proposed:

1. The Ministry of Health agrees to apply the minimal selection criteria for Primary Health Care Workers in the Tihama Region from the national Plan of Operations. The current educational requirements will be removed.

2. The Ministry of Health agrees to assume basic salaries for all certified workers trained under this project. The Ministry of Health agrees to provide training honorarium, overtime and travel per diem for all MOH trainers on a gradually increasing basis over the life of this project.

3. The Ministry of Health agrees that nurses and doctors will not be assigned to villages where PHCW's are stationed. In addition, the Ministry will endeavor to select PHCW's from villages where there are no injectionists or nurses currently in practice.

The following condition Precedent to disbursement of funds is proposed:

Prior to disbursement of funds the MOH shall indicate to USAID by letter the primary counterparts for the project. This will include, by name and position, the counterpart for the project administration (chief of party), the training specialist, the survey specialist, and the media specialist. In addition, the MOH will delineate the lines of authority and decision making in Hodeidah and Sana'a so that lines of communication are clear to project personnel.

#### D. PROCUREMENT

A source and origin waiver is required for procurement of six project vehicles to transport recruitment and supervisory teams to isolated villages in the Tihama, and to conform to the MOH transport maintenance plan and spare parts system (See Annex C ). Except for Yemeni Rial costs for local support and training and supplies, the source of all other eligible goods and services shall go to the U.S.

The Ministry of Health, working with UNICEF, has developed a list of standardized commodities for the nation-wide Primary Health Care Project. This includes a standard list of drugs, vehicles (Japanese made, four wheel drive) and some training materials.

In order to maintain this standard system the following procurement system is proposed:

- drugs will be supplied by UNICEF, as a contribution to the project.
- other commodities will be funded by USAID.
- UNICEF/Sana'a will be authorized to serve as procurement agent for vehicles and other miscellaneous commodities of a standardized nature.

E. ENVIRONMENTAL ASSESSMENT

The environmental assessment for this project remains unchanged from the original project paper.

TABLE A  
PROJECT IMPLEMENTATION SCHEDULE

<u>ACTION</u>	<u>DATE</u>	<u>RESPONSIBILITY</u>
1. Project Paper Submitted	6/28/82	USAID
2. USAID Health Officer arrives Sanaa	8/15/82	AID/W & USAID
3. Initial 6 month work plan and budget designed by Health Officer and approved by MOH	9/15/82	USAID
4. Three interim 6 mo. PSC's signed, one interim training monitor, one Health Medical Survey Expert; and one administration/management advisor	8/15/82	USAID
5. Arrangements completed to continue selected Yemeni staff during <u>transition</u>	9/01/82	USAID/MOH/CRS
6. Project Agreement signed with YAR.	9/01/82	USAID/MOH
7. Initial Project Vehicles (3) ordered	9/15/82	USAID
8. CRS Demobilization Completed	9/10/82	CRS/AID/W & USA
9. Contract signed for U.S. T.A./Implementation Agency (timing based on a sole source procurement)	10/01/82	AID/W
10. Contractor Long-Term T.A. Team in Yemen (Management/COP & CBT Training)	2/01/83	
11. Contractor's Implementation Plan Submitted	5/15/83	Contractor
12. Project Equipment & Supplies Order #1 Completed and Reported	6/15/83	Contractor/ UNICEF
13. Baseline Health/ Facilities Surveys Completed and Reported	7/30/83	Contractor
14. Contractor's Annual Report #1 Submitted	2/01/84	Contractor
15. Project Evaluation Conducted and Reported	2/15/84	USAID & AID/W
16. Contractor's Annual Report #2 Submitted	2/01/85	Contractor
17. Project Annual Review Conducted and Reported	2/15/85	USAID & AID/W
18. Project Equipment and Supplies Order #2 Ordered	5/01/85	Contractor/ UNICEF
19. Contractor's Annual Report #3 Submitted	2/01/86	Contractor

20.	Project Annual Review	Conducted and Reported	2/15/85	USAID & AID/W
21.	Contractor's Annual Report #4	Submitted	2/01/87	Contractor
22.	Contractor's Final (Impact-Focused)	Report Submitted	4/15/87	Contractor
23.	Final Evaluation (Special)	Conducted and Reported	6/30/87	USAID & AID/W
24.	PACD of Project		6/30/87	USAID & AID/W

BUDGET ESTIMATES (\$000's)

	<u>FY82</u>	<u>FY83</u>	<u>FY84</u>	<u>FY85</u>	<u>FY86</u>	<u>FY87</u>	<u>TOTAL</u>
I. Technical Assistance							
A. Long term (U.S.)	95	390	590	455	455	455	2440
-Mgmt (COP)							
-Training							
-Survey							
B. Short term (U.S.)	20	60	175	142	109	90	596
\$19,000 X 35 pm							
C. U.S. Tech Backstopping, Support	-	50	90	90	75	75	380
D. Local Hire Support (\$28,500/mo avg.)	26	130	130	130	80	80	576
Tech. Assistance Subtotal	<u>141</u>	<u>630</u>	<u>985</u>	<u>817</u>	<u>719</u>	<u>700</u>	<u>3992</u>
II. Training							
A. U.S. Long-term (\$33,300/18 mo)	-	33.3	66.6	33.3	-	-	133.2
-Four MPH	-	33.3	-	33.3	-	-	66.6
-Two Media Prod.	-	33.3	33.3	-	-	-	66.6
-Two Systems Mgmt-Health	12	-	-	-	-	-	12
B. U.S. & Third Country Short-term (\$3,900/mo)							
-30 pm	-	20.1	31	31	23	12	117.1
C. In-country	9	147	150	150	100	62	618
-HMI Training							
-Workshops/Seminars							
-Stipends							
-Language							
D. MOH Trainers							
-Overtime/Travel Costs	9	102	80	60	40	20	311
Training Subtotal	<u>30</u>	<u>369</u>	<u>361</u>	<u>307</u>	<u>163</u>	<u>94</u>	<u>1324</u>
III. Commodities							
A. Supplies	30	100	200	200	150	150	830
-Office							
-PHC Units							
-Lab							
-Forms/Records							
-Graphics							
-Drugs							
-Petrol							
B. Equipment	-	100	150	200	150	100	700
-Instruments							
-Media Prod.							
-Visual/Trg. Aids							
-Books/Materials							
C. Vehicles/Spare Parts	60	-	-	-	-	-	60
Commodities Subtotal	<u>90</u>	<u>200</u>	<u>350</u>	<u>400</u>	<u>300</u>	<u>250</u>	<u>1590</u>
IV. Other Costs							
A. Preimplementation Costs	5	-	-	-	-	-	5
Refurb Existing	-	20	20	22	25	0	87
Housing Completion	10	-	-	-	-	-	10
U.S. Data Processing	-	15	20	20	20	15	90
Evaluations	-	-	20	-	-	30	50
Intern Travel	-	5	6	7	8	9	35
Other Costs Subtotal	<u>15</u>	<u>40</u>	<u>66</u>	<u>49</u>	<u>53</u>	<u>54</u>	<u>227</u>
Subtotal	276	1,239	1,752.0	1,572.0	1,235	1,098	7,183.0
Inflation (3.0%)(compound)	-	130.0	303.0	408.0	445	515	1,801
Contingency (3%)	8.3	37.0	53	47	37	33	215
TOTAL	<u>284.3</u>	<u>1,406</u>	<u>2,112.0</u>	<u>2,028</u>	<u>1,717</u>	<u>1,646</u>	<u>9,199</u>

\* NOTE: This budget does not include unexpended funds from CRS-OPG. If any funds become available after close-out of the OPG, the budget will be adjusted accordingly.

ESTIMATED YARG CONTRIBUTION TO TIHAMA PRIMARY HEALTH CARE PROJECT \*

(U.S. \$ 000)

	<u>FY 83</u>	<u>FY 84</u>	<u>FY 85</u>	<u>FY 86</u>	<u>FY 87</u>	
MINISTRY OF HEALTH						
I. MOH Staff						
- training/project staff	208	225	250	275	300	
- Health Worker Salaries	80	160	300	400	500	
II. Commodities						
- Equipment for Facilities & Maintenance (Estimates)	400	440	500	550	600	
-Drugs & Supplies for Facilities (Estimates basdd on expanding number of facilities)	185	350	500	550	600	
-Petrol for Supervision Teams	36	50	80	120	160	
III. Project Support -Governorate - office/utilities, etc.	40	50	60	70	80	
IV. Central MOH Support - In Kind** - Media - PHC Program Support						
V. - Training incentives- MOH to pick up on a gradual basis thruout project	-	40	80	120	160	
VI. Capital Costs -- MOH Sub-Centers (FY 83 includes 6 presently constructed)	880	300	350	-	-	
Centers (2 presently constructed)	<u>410</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	
TOTAL MOH	2,239	1,615	2120	2,185	2,600	<u>\$10,759</u>
LOCAL DEVELOPMENT AUTHORITIES						
I. Facilities ***	540	180	180	96	84	
II. Equipment	16	16	20	20	20	
III. Training Support (based on TPHC support to date)	<u>11</u>	<u>13</u>	<u>15</u>	<u>20</u>	<u>25</u>	
TOTAL LDA	567	209	215	130	129	<u>\$ 1,250</u>

TOTAL YARG CONTRIBUTION        \$ 12,009

\* This budget does not include costs contributed by the YARG for FY 81-82 which were outlined in the original Project Paper.

\*\* In Kind Personnel, TV Time, health education materials, etc.

\*\*\* LDAs are committed to one half of costs of 89 PHC units in project area @ YR 120,000 each. UNICEF will provide half for 12 of these centers and USAID will provide matching grants for the remaining 77.

\*\*\*\* Host country contribution may increase after initial survey completed and number of PHCWs to be trained is finalized.

#### IV. B. FINANCIAL ANALYSIS

The public sector financing of health services in the Yemen Arab Republic is characterized by line item budgeting which makes it virtually impossible to determine program costs or to perform cost effectiveness analyses. It is also characterized by substantial capital and recurrent cost contributions from bi-national, international and non-governmental sources which are not reflected in the Ministry of Health budget. Two reports have been prepared in recent years which provide substantial detail and documentation on health sector financial issues.<sup>1/</sup>

Financial support for basic health service activities is being provided by the Central MOH through the Governorate Health Office, by the Local Development Associations, and by individual donors. Therefore, contributions to each area vary according to the size of the program and stage of development of the individual program. Over the past two years the MOH and LDA's have contributed substantial resources to the Tihama PHC project. Contributions have included training staff, stipends for trainees, support costs such as transportation, housing and health facilities, drugs, supplies and equipment. LDA's have participated in the selection and financial support of trainees, have contributed land and labor for health centers, and have committed land and approximately one-half the costs for 30 new Primary Health Care Units in the project area (estimated at YR 120,000 each) with UNICEF financing the other half of the units. In addition to the construction of these units, UNICEF has an existing project with the MOH to provide equipment, drugs and vehicles for these units. The AID project will train the workers and develop the supervisory and support systems.

The AID project budget provides three long-term U.S. advisors and 44 months of short-term assistance with extensive assistance in media production (6 months initially and continued shorter consultations). It also provides U.S. and Third Country training and in-country training and workshops. The equipment necessary to support this training is included as well as six vehicles for project staff and the supervisory teams. The budget also includes funds for media production and health education materials which is a new element of the project.

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<sup>1/</sup> See, O.H. Calika, An Addendum to "Draft Proposal by the Ministry of Health for an IDA - Assisted Health Project in YAR", Sanaa, March, 1981, and Catherine Fort, "Financial Analysis of the Proposed CRS Basic Health Services Project, AID/NE/TECH/HPN, August, 1979.

MOH costs are based on a January 1982 list of MOH salaries and positions and projected for the increasing number of workers over the life of the project. The budget estimates no new health centers or PHC units (beyond those committed with UNICEF) but does estimate two to four new MOH funded sub-centers.

The honorarium and per diem for MOH trainees is shared by AID and the MOH with a gradually decreasing contribution by AID and gradually increasing contribution by the MOH.

Through FY 82, \$2.2 million has been obligated by an Operational Program Grant. As this amendment is being prepared, the termination plan of the grantee is not yet available. The project revisions fit with the remaining \$9.3 million in the original project design. However, additional funding for design, production and distribution of health education and media programs could greatly facilitate the project objectives and should be explored if funds remain unexpended within the original \$2.2 million obligated.

## V.A. SOCIAL ANALYSIS

The Tihama Project is predicated on the assumption that training of PHCW and LBAs will raise the standard of health care services by providing preventive care and by providing village based services resulting in more extensive coverage. Improving the quality of health care services to the rural population of the Tihama cannot be accomplished through a physician-dominated, centralized system. Ideally, in such a training program both locally established and traditional healers would be integrated into the training as much as possible. However, the reality of the situation in the Tihama is that PHCW and LBA training programs will attract few if any people from either of these categories. Thus, inservice training programs have been suggested as one way to improve the quality of existing health care provider service. It is recommended that this inservice training program include a provision for reaching the traditional birth attendants (TBA or jidda) within their own environment. Several jiddas contacted said that they would have no objection to attending informal discussions in their own village, but that they would not travel to a center for training; furthermore, they had little interest in becoming an employee.

A discussion of the social and HCDS context of the Tihama training program must take into account the following factors.

### A. CURRENT HEALTH CARE BEHAVIOR OF TIHAMA RESIDENTS IN LIGHT OF THE FORMAL HCDS; AND THE EXISTENCE OF WELL ENTRENCHED "NURSES" AND INJECTIONISTS OPERATING WITHIN THE INFORMAL HEALTH SPHERE

The main conclusion here is that nurses and jiddas within the informal health sector will continue to be the first resort of Tihama residents without a concerted effort to acquaint the populace with the PHCW and LBA program's goals and personnel.

### B. THE HIGH PRIORITY WHICH SHOULD BE GIVEN TO THE LBA PROGRAM OR VARIANT THEREOF AND THE NEED TO CREATE A VIABLE LBA ROLE MODEL WHICH CAN ATTRACT RECRUITS OTHER THAN THE FAIRLY "MARGINAL LBA RECRUITS TO DATE"

Here the main conclusion is that to date, Tihama rural women depend heavily on jiddas for delivery and that Tihama women may take ailing children to nearby health facilities and may, but even more rarely, seek health care there for themselves. LBAs or some variant thereof would provide more accessible health care to women. It is not clear that young, usually unmarried or divorced, women of the village are the best individuals to fill the LBA role, although they are the most likely to be recruited.

### C. THE BACKGROUND OF PHCWS AND TRAINEES, THEIR SELF CONCEPTION, THEIR COMMUNITY'S PERCEPTION OF THEM AS HEALTH CARE PROVIDERS AND AS COMMUNITY MEMBERS

Any conclusion here is tentative as only 3 PHCWs have actually been established in the community; however, to date their role

as versus that of a nurse or injectionist has not been clearly established as to what they can do as much as it has (negatively) as to what they cannot do, as perceived by the community.

Whether or not their future role as PHCWs is critically influenced by their background (most have not previously provided health care; most seem to have been picked as available sixth grade graduates not currently engaged in some more gainful occupation) remains to be seen.

D. THE ROLE OF THE LDAS IN TRAINEE SELECTION AND SUPPORT;  
THE RELATION BETWEEN MOH AND LDA; THE FEASIBILITY OF THE  
LDAS DEVELOPING AN INSTITUTIONAL SUPPORT SYSTEM FOR PHC  
AND LDA CARE

To date, the Tihama Project - LDA relation has been mainly limited to securing formal agreements for support of PHCW trainees and construction of units. More involvement of the LDAs and communities will be needed.

A. TIHAMA HCDS\* AND HEALTH BEHAVIOR:

The "average" residence of a Tihama village of less than 5,000 residents will treat him or herself in the case of minor complaints, and in the case of an uncomplicated delivery will be assisted by female relatives and neighbors, one of whom may be a jidda (TBA). If symptoms persist, a man will probably go to a clinic if available or consult a nurse (informal sector) in the vicinity; in most areas such a nurse can be found within a half hour to an hour ride from the village. A woman may consult a nurse, especially if he is in the same village; whether or not he will actually examine her is dependent on his status in the village. Some women will allow an M.D. (in a clinic) and some nurses (usually in a home) to examine them "from the waist up". (Even female nurses and trained midwives experience reticence among women regarding pelvic examination.) What takes place in the case of male nurses, was summed up well by a young woman:

"When my mother feels tired, she is examined by the local nurse. This means that he talks to her, and then he prescribes a drink, pills, and an injection. If she is not too tired he sends her away without doing anything but talking and writing."

As for the young woman herself, like most other young, unmarried women she had never been examined by a health practitioner. When asked about frequency of examination, older women indicated that they had been "a couple of times" in their life. Women were much more likely to have been examined by a "nurse" operating within the informal sector than they were to have gone to a clinic. Most who had gone to a clinic had done so for an emergency or for a very sick child. It appears that recurring gastro-intestinal infections, malaria and other childhood problems are not treated in early stages and that PHCWs could be particularly useful here.

The health care pattern, encouraged by centralized hospital and clinic services, is to delay seeking care until symptoms have become critical; this takes a heavier toll on children.

Further attention must be given to the impact of client expectation, originally in part practitioner (of whatever training--M.D. to informal nurse--to be sure), engendered, on health provider practices. The most obvious issue is that of "The Injection" (see discussion of PCHW role and further discussion elsewhere in the report). Tihama residents, like many others, do not feel that they have been serviced unless they are given an injection, albeit only Vitamin B. A woman whose placenta had not been expelled, told the midwife TA: "Just get me a shot so I can be over with it." There are other patterns which need scrutiny as well--such as the tendency to overprescribe crystallized in the expectation cited above that the nurse would prescribe "three kinds of things." (Even M.D.s have been known to prescribe vitamins three different ways to keep their patients happy.)

#### B. LBA RECRUITS: MARGINAL PEOPLE IN SEARCH OF A ROLE MODEL

Until there is some precedent--the most likely being female education--for placing young women in an extra-domestic sphere, the LBA program as it exists is destined to depend heavily on "marginal" women for its recruits. Most LBA trainees and future candidates are divorced, unusually well educated, or urban. (A potential recruit from Hatariyya is a real exception because whereas most villages have no formal female education, she studied through grade six when her father was working in Saudi Arabia.) Such young women are more mobile than the average uneducated, married or never married village woman. LBA recruit flexibility may be a result of living experience rather than education per se. For example, an LBA recruit from Munkhim had lived in Hodeidah for two years; although her only formal education there was two weeks of sewing class (terminated because she could no longer leave her child at the neighbor's), she had lived in another world. (She dropped out of the program when her husband, who had been planning to accompany her to the training center, was deselected as a PHCW candidate.)

The ethnic marginality (often correlated with more open life experience) of some female training candidates is also apparent. Two of the CHNs at Tahrir are of half Yemeni and half Ethiopian ancestry. (The akhdam, low status "caste" of Yemen is of Ethiopian origin:) an LBA dropout describing other interested women noted: "They are not really Yemeni; they are Ethiopian."

Considering the progression of a woman's decision to join or drop the LBA training program highlights the importance of the relatively free status of a divorced woman. She is free

from familial obligations, and somewhat freer from the "talk" of other people, if only because there is one less male (her former husband) "on her case." But even so, the matter is not that clear cut. For example, Sayyida and Aysha are two young women of Deir Mehdi, a village twenty minutes for the Zeidiah health center. Both had expressed interest in being trained, but the day the TA midwife, the midwife student trainee, and the anthropologist visited them, it was found that both had lost interest.

Sayyida was divorced two months after she gave birth to a son (her first, now seven months). In her case, she took the initiative and told her husband to get out. It was at about that time that she became interested in the LBA training program. She, like most women, had helped at births of neighbors and sisters, but she had never "cut the cord" (an act that may demarcate the "real" midwife; in urban Egypt, traditional midwives will leave the cord to be cut by clinic midwives). "The raisa cuts the cord with a clean razor, and just leaves it", said Sayyida. We had a lengthy discussion with Sayyida about the possibility of her mother coming to live with her in Zeidiah and take care of the child; Sayyida was ambivalent even when, at the end of the visit, her mother appeared and expressed tentative willingness. The TA and student encouraged her saying: "You will study and benefit and then you will be able to serve your community." Here a woman listening chimed in: "Will there be a salary?" The interview ended with Sayyida's affirmation that she would never marry again because men oppressed one, but no definite commitment to LBA training.

The Zeidiah team then went to see Asha, the other potential recruit. She had been divorced by her husband two years ago, shortly after a still birth. She had taught herself to sew and like Sayyida had no plans to remarry. Unlike Sayyida, she had actually gone to take a look at the clinic, and had decided that she was not interested in being trained there. (One of the suggestions made by the staff at Zeidiah has been the provision of a classroom for LBA trainees in an extra-clinic setting.)

As vignettes (See Appendix, Part I) make clear, co-ed transportation to the project has been one obstacle to the acceptance of female training. It is not clear that even if separate busses were provided, however, that other objections would not be raised. More substantial than transportation is the lack of a codified niche for women professionals in rural Tihama society.

Another issue is community acceptance of LBAs. There is no evidence either way to date; the lack of delivery experience of trainees is mainly a result of short clinic hours (alleviated by a live-in midwife TS in Zeidiah) and of the necessity of natural births (a health center tends to get only a limited number of critical cases).

Changing recruitment tactics and program structure so as to attract more "middle-aged" jidda TBAs is one option that should be considered. Older jiddas would probably never be persuaded to do more than in-service, village-based training. But if middle-aged women could be interested in some variant of the LBA program, they would be preferable to present candidates because: (1) they possess valuable delivery experience; (2) they tend to be less socially marginal, and more plentiful than the current type of LBA candidate.

Given the current project's problem in providing delivery experience (within existing hospital and clinic provisions), it would seem judicious to put an emphasis on a search for (and payment of appropriate overtime premiums to) midwife TA/TS's willing to live in villages to provide more practical field site training.

The above discussion indicates that both situational, individual, and structural constraints such as the lack of a community accepted LBA role model are important obstacles in current recruitment. The prime reason for at least one recruit already in training dropping out was the pressure villages put on her father to keep his daughter from "going out in a car with men" (see LBA Trainee Dropout A in Appendix). MOH personnel have suggested that a majority of Midwife TA or TS job responsibility in centers be assigned to the recruitment process. The more visible and approachable these professionals can be to both villagers and jiddas, the more chance there is for the acceptance of the LBA training program.

#### C. PHCWS AND PHCW TRAINEES: WHO THEY ARE AND WHO THEY WILL BECOME

A social analysis of the PHCW must ask both what kinds of people are being recruited and what kind of identity PHCWs (will) have in the formal and informal HCDS constellation described under point A. It seems that the Lawiyya and Muneira PHCWs are somewhat established in their units, but the ability of PHCWs to compete with "nurses" has not been established. It is, however, not fair at such an early date to conclude that because Tihama residents most often resort to "nurses" within the informal health sector that PHCWs cannot become a significant element in this sphere. Given the nature of health care, where everyone from physician to untrained injectionist tends to have a Ministry job by morning and another (more lucrative) practice by afternoon, for the PHCW to succeed he must forge a place of respect within the informal sector. Remuneration issues aside, if village residents never beat a path to his home in the afternoon or never solicit his opinion outside of the clinic, then he is also unlikely to have an efficacious role in the formal HCDS. In short, the PHCW must assume a role as a "community known" if not "community notable" to succeed.

Although one could hardly expect real notables to want PHCW training, one must give some attention to the social profile of the PHCW trainees at present. (See Appendix, Part II). Although one cannot document it, one gets the feeling that most trainees were picked by their LDAs because they were someone with 6th grade education who was not otherwise gainfully employed; that is, they were "available" and so, although more "suitable" candidates, such as those already gainfully employed or those lacking 6th grade education, might exist elsewhere. Only in two cases of the eleven trainees questioned, had the candidate been employed in a real, remunerated job. (Some had gotten petty cash for assisting families or running errands.) Indeed, for several, becoming a PHCW meant stopping other education and training. The other side of the coin is that some candidates may be picked because of their family ties (nine of the eleven trainees questioned had a father who was the village aqil, an uncle on the cooperative council, a brother who was village secretary, etc.) and thus they may have a standing in the community. In the case of at least one candidate, this special position, however, means that he does not feel compelled to attend classes.

As for the 3 PHCWs who have been placed, only the one in Muneira operates in a clinic and community environment relatively free of "nurse" competition. However, the problem is not picking PHCW sites without nurses, but rather dealing with the "nurses", who are omnipresent in the informal sector, and providing institutional and community supports for the PHCW through LDA/community work and health education.

PHCW's report their goals according to the PHCW code ("I want to provide guidance for people and serve my country," etc.) and they feel that they are providing a service. But their place in the HCDS constellation is not yet set and developments in the next couple of years in health education and in MOH quality control are critical. If the situation is left to inertia, nurses will try to define PHCW's into as restricted a role as possible. To date, the PHCW role is defined more in relation to the nurse and in terms of what the PHCW cannot do. This definition may be a true job description, as with no injections, or it may be a result of nurse manipulation of a situation, as with no dispensing of drugs (when clinic nurses try to muscle PHCWs).

PHCWs themselves have some doubts. One of the three with a clinic site described his view of the future: "There is no future. Our salaries are low and our medicine is weak (da'if) for our needs."<sup>1</sup> The same PHCW felt he should have certain injections within his medicine, "I am not supposed to give injections, but what if someone has an asthma attack? I should be able to give them an injection of amonophyllin." It is to be

<sup>1</sup>The same PHCW, however, at another point in the conversation, said: "My work is going on orderly; the most important matter at this time is the completion of the health unit."

expected that PHCWs themselves and the community will judge them(selves) vis a vis known medical practitioners. That is exactly why the medical educational vistas must be broadened.

The PHCW trainee (as opposed to graduate) opinion of future professional relations is that he will "watch and learn" from doctors and that he will "help" in an equal collegial way nurses and midwives do. The program should strive to keep this positive professional self definition, which risks disintegration upon the PHCW's entry into the real world of health service.

#### D. THE LDA: CAN IT ADMINISTER PHC AND LBA PROGRAMS?

The project staff has established initial relations with local LDA's which have been limited to signing of trainee and construction support agreements. Even in the one or two eager villages where health committees have been formed, there is little sense of what their activities should be. In the coming year, LDA-project relations must become more diffuse and "thick". Obviously this does not mean individuals who are literally LDA members but "local notables" as well as other personnel (e.g. nurses, drug sellers, school teachers) who can assist (or sabotage) the program. It is the LDA's who will provide recruits and if there is to be any chance to informally review possibilities it will be through the LDA's good graces. Furthermore, LDA and local notable roles must be expanded to more than contractual support.

It should be noted that the project staff has established more solid relations with an assortment of potential/deselected trainees, their friends and families, and other health care personnel in the villages. Building on these relations should be facilitated by retention of several of the Yemeni staff and by the provision of adequate overtime pay to allow field visits during afternoon hours when gat chewing sessions provide an appropriate ambience for community politicking.

In summary, a social analysis of the Tihama project concludes that:

1. The PHCW role must be positively established in the present HCDS constellation so that the PHCW is not backed into a corner by threatened "nurses".
2. The LBA program should attempt to attract "middle-aged" jiddas who will be more viable candidates than the present inexperienced, socially marginal recruits. The MOH is currently devising a training program geared toward "middle-aged" jiddas. It might be wise to consider using some of the available younger, sometimes educated women in a role other than the three year nurse or the village-based LBA.

3. The social profile of PHCW and LBA trainees should be monitored and its impact taken into account in revising candidate criteria.

## B. ADMINISTRATIVE ANALYSIS

The original Project Paper did not include an Administrative Analysis and major administrative problems arose in implementing the first 2 years of the project which must now be addressed as the project is amended. These include:

- relationship of the Ministry of Health counterparts in the Tihama to the U.S. contractor;
- relationship of the project activities, carried out by the Hodeidah MOH office, to the central MOH;
- coordination with other donor activities, in primary health care;
- internal MOH coordination; and
- coordination with the Ministry of Information in carrying out the media and health education elements of the project.

This project follows the central Ministry of Health guidelines and Plan of Operation for primary health care in the Yemen Arab Republic. While the central MOH provides overall guidance and support, direct implementation responsibility rests with the governorate level MOH staff. However, it is important that the central MOH be consulted regularly and kept informed of project progress, decisions, consultant travel and participant training. Two elements of the project, the health survey and the health education/media components, are to be initiated as part of the Tihama project, but will be considered for replication on a larger scale and therefore must be closely planned and coordinated with the central MOH. Because of this divided responsibility, it is essential that the contractor identify in the Implementation Plan specific MOH and other government agency offices and their role in each project activity.

There are a number of donors assisting the YARG to implement its Primary Health Care plan. It will be important in the early stages of contractor activity that a plan for coordination with the other donors is developed. This has not been done to date in the project.

The Local Development Authorities also play an important role in recruiting Primary Health Care Workers and in funding facilities; this relationship remains critical, as described in the original PP.

The MOH basic plan for PHC includes Health Centers, Sub-Centers and FHC Units. The Tihama project area has two existing Centers (Taheer and Zeidiah) and several sub-centers. With UNICEF assistance 30 PHC Units are to be constructed (15 in Taheer and 15 in Zeidiah). The MOH has expressed a need for

survey of the project area which will identify and inventory existing facilities, personnel, supplies and equipment. The results of the survey will be reviewed in light of the plan for construction of UNICEF-financed facilities and will assist the MOH in the determination of priority needs for training and recruitment of workers, in-service training, equipment and new MOH construction of sub-centers and primary health care units. This survey must be undertaken by the MOH and the contractor and should be used to develop the contractor project implementation plan which is to be approved by the MOH and USAID.

## V. C. TECHNICAL ANALYSIS

The technical analyses which were presented in the Tihama Primary Health Care project paper still accurately reflect the feasibility of implementing this project. There is a major change in the number of health workers who will be trained and certified, but this reflects adjustment to MOH guidelines for project implementation. The concept of competency based training remains a sound one, however further refinement of training materials is expected after the experience of the first group of primary health care workers has been evaluated. Job descriptions and task analyses will also be reviewed and revised as needed throughout the life of the project, and the relevancy of training to the conditions encountered by primary health care workers at their work sites will be assessed regularly. The management and support systems which were to be developed according to the plans outlined in the original project paper will continue to be developed, under the direction of a management/financial specialist.

Surveys which were to provide baseline data on health problems and changes in health status will be extended to include information regarding nutritional status and utilization of health services. Standardized sampling procedures will be used (either cluster sampling or stratified random sampling). The surveys are expected to provide information which is not readily obtainable in other ways. It will serve several purposes, including:

- Initial assessments of the health situation in an area, with some indications as to the priority to be assigned to establishing PHC services in specific subareas and to specific services which should be emphasized
- Development and validation of the nutritional status and morbidity aspects of an ongoing system for collecting, processing, analyzing, interpreting and using data regarding health and health services. (The long term survey expert will work with the management advisor/COP and with short term information system experts to this end.)
- Assessments of changes in health and nutrition status useful in adjusting PHC program emphases and in program evaluation (although it is usually very difficult to demonstrate causal linkage between services and health status changes)

Impact assessment is theoretically desirable, however there are serious conceptual and practical difficulties, such as experimental design and attribution of causality, sample size and costs. Nevertheless, data from the survey will be used in the evaluations as a means to measure changed health practices or increased community awareness of health issues.

A large percentage of the Yemeni population in urban and rural areas have access to television. Television is the principal information medium in the country. The Ministry of Health has regular broadcasts which have been used to promote primary health care, breastfeeding, and other good health practices. The current broadcasts consist of didactic talks and discussions which feature MOH physicians, still pictures and imported health film clips. Radio and television programming experts who have visited Yemen believe that such programs have a limited impact as presently constituted. Radio broadcasts from Sana'a (national coverage), Taiz and Hodeidah (regional coverage) also have a large audience, however, the preferred medium is television.

Television and radio materials would need to be designed specifically for Yemen in order to assure that the messages were being received and interpreted as intended. MOH officials have indicated that there are half hour television segments which are permanently assigned to the MOH, that this time could be increased or split into smaller segments, and that the MOH is free to submit its own materials for broadcasting at that time.

Television station officials have expressed interest in the design and production of new health education materials, in the use of U.S. experts in the design and production of these materials, and in technical training to upgrade the skills of the TV station staff so that these materials could eventually be designed and produced in Yemen. The material produced may include animated cartoons, stories, songs, poems. U.S. media experts will be used on a short term TA basis to assist with the market research, design, production and testing of these materials.

## IMPLEMENTATION ISSUES

There are several important implementation issues which were identified during the second year project evaluation and subsequent redesign of the project. These include 1) recruitment and selection criteria for trainees (primary health care workers and local birth attendants; 2) competition in the villages between newly trained primary health care workers and other health workers; 3) MOH salaries and supplements; 4) testing and certification procedures for trainer/supervisors and PHCW's; 5) the role of the community health nurse; 6) participant training language requirements; 7) LDA support of primary health care programs; 8) the commitment of local MOH personnel to primary health care; and 9) nutrition and family planning activities in the basic health services programs.

1. The Hodeidah MOH office had established selection criteria for PHCW trainees which included 6th grade certificate and a limitation of one PHCW per village. The MOH has since agreed verbally that the selection criteria will be the same as they are in other areas, that is, ability to read and write, and, in larger villages, 2 PHCW trainees can be recruited. The selection criteria for local birth attendants are still not clearly spelled out. The British volunteers in Jebel Raymah have made a series of recommendations based on their experience, and other groups have made other suggestions. The social analysis included in this project paper amendment discusses some of the issues which must be considered as the LBA program develops.

2. The other health workers in the project area villages include traditional practitioners, and trained and "experienced" nurses (some of the nurses have MOH certificates to practice. It will be important for the health resources survey to identify the number and kind of health workers who have already established practices in the Tihama villages, to determine the nature of their services, identify potential problems, and eventually to recommend action to either retrain and certify these individuals or terminate contracts or practices where they are considered detrimental to the MOH plans. The MOH has already recognized this problem in areas where certified PHCW's are newly established, and is making an effort to support the work of the PHCW. These efforts will need to continue if the basic health services plan is to be successfully implemented. Some specific recommendations are:

- Clear definition of the PHCW's role, and full MOH support of that role, along with clear definitions of the roles of other MOH workers in relation to the PHCW

- Not granting any more MOH "licenses" or certificates to practitioners other than those graduating from MOH-authorized courses and tested and certified by the HMI (a step which the MOH is initiating)
- Enforcing sanctions against those violating regulations regarding provision of health services
- Supervision and control of already licensed practitioners (and revocation of such licenses and certificates, where possible, if standards and regulations are not followed
- Providing special training to improve the skills and practices of such providers
- Recruiting, training, and controlling such persons as PHCWs.
- Reassigning untrained and uncooperative workers who are receiving MOH salaries to other areas where PHC programs are not to be implemented soon
- Promoting public confidence in the PHCW's through the media program, full and visible MOH support of PHCWs in their villages, and other means.

3. MOH salaries and supplements are frequently below the levels which are permitted according to YARG regulations, and are also below private sector salaries. Although physicians, nurses, x-ray and laboratory technicians work in the private sector to supplement their MOH salaries, the PHCW is not expected to do this. Furthermore, the community and environmental health work which is part of the PHCW's job frequently requires work in the afternoon. It will be extremely important for the MOH to recognize and clearly define the roles and responsibilities of all health workers and to compensate them adequately for their work. The MOH has committed itself to full payment of salaries and adequate supplements in the Zabid clinic, and is expected to do the same in the Tihama project area. This will require accurate job descriptions and a mutually agreeable plan for MOH assumption of financial responsibility.

4. The testing and certification of health workers in Yemen is the responsibility of the Health Manpower Institute. To date, testing and certification procedures have been developed for the community health nurse and primary health care worker. Further work is needed on periodic in-service skill testing for all workers, testing of trainer/supervisors, and local birth attendants. As the various training programs are modified, testing procedures (and test content) will also need to be revised.

5. The role of the community health nurse and her relationship to other health care workers has never been well established. While there may be a real need for a female health care provider who can be trained in 18 months to provide intermediate level MCH-nutrition services, the relationship of this individual to the PHCW, the LBA, the nurse, and the nurse midwife, and the subordinate-superordinate roles of each have yet to be determined. The support of the MOH for the CHN has been uneven, and the recruitment of trainees has been difficult. The need for this worker needs to be explored further, and a decision made regarding the future of the program.

6. Participant training is one of the most important means to upgrade the technical knowledge and skills of Yemeni health personnel. The number of countries which offer appropriate courses in Arabic is limited. An important part of the participant training program will be to provide appropriate language instruction with sufficient lead time to develop competency prior to actual technical training. The Swedish experience with participant training has been one of the most successful long term efforts in Yemen. They could serve as a valuable resource for the development of a participant training plan.

7. The support of the Local Development Associations has ranged from excellent to nil. Some LDA's have transferred land to the MOH in anticipation of clinic construction, recruited trainees and paid their share of training stipends and other expenses. Other LDA's have expressed no interest in the basic health services program or have recruited but failed to support their trainees. It is extremely important to maintain regular contact with the LDA's, to encourage them to form health committees, and to educate them about primary health care, the basic health services plan and its potential benefits to their communities. It is only through regular contact with the communities that support for the program will be assured.

8. The plan for basic health services involves the majority of MOH personnel and affects their work either directly or indirectly. It is extremely important that all MOH employees understand the rationale for the basic health services program, the activities it is expected to encompass, and their relationships to the program. To date there has been no systematic effort to inform MOH employees of the program and to explain its goals, planned activities, and its importance in improving the health status of the population. A concerted effort to orient MOH employees (from M.D.s and administrators to custodial personnel) to the program is needed.

9. Although the YARG has no official national policy on population or family planning, family planning information, education and services are being provided by all major donors in the context of family health and maternal-child care, with child spacing for the health of mother and child the primary objective.

There is a need for further development of the training curriculae of all health workers on this topic, and a need for information and education materials in Arabic, as well as short term participant training as candidates become available and opportunities are identified.

The nutritional status of women and children was identified as a major national problem as a result of the national nutrition survey in 1979. There is a real need for a thorough review of nutrition components of all curriculae and for further work in the identification of nutrition activities which can be incorporated into the work of the basic health services program.

LOGICAL FRAMEWORK

Country: Ethiopia  
 Total U.S. Funding: \$11.4 million  
 Date Prepared: 9 June 1982

Project Title & Number: TIHAMA PRIMARY HEALTH CARE PROJECT, 279-0065

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:                      To assist the YARG and the people of the Tihama to improve health and health services in the Tihama Region, within the PHC policies and guidelines of the MOH.</p>	<p>Measures of Goal Achievement:                      Changes in health status and in selected health problems in health services and in their utilization, in accordance with MOH PHC policies and guidelines.</p>	<p>Baseline &amp; followup surveys (or followup analyses of data from an information system) of health services, utilization &amp; acceptance of health services, &amp; health status (including infant &amp; young child mortality, diarrheal deaths, immunization status, nutritional status, maternal mortality, fertility, tuberculosis, malaria, and sanitation)</p>	<p>Assumptions for achieving goal targets:                      MOH PHC policies and guidelines will not undergo major changes during project lifetime (to June 30, 1986) which decrease support for PHC.                      The economic level of the rural target does not suffer any serious setbacks.</p>
<p>Project Purpose:                      To establish a functioning Primary Health Care system in the Tihama, with adequate MOH and community support, and conforming to MOH PHC policies and guidelines.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.                      - PHC facilities &amp; personnel competently serving selected Tihama communities in accordance with MOH standards and guidelines and in keeping with service needs determined on the basis of health surveys.                      - Organization &amp; facility infrastructure in place in Tihama region</p>	<p>Review of Project &amp; MOH &amp; MHI records, reports &amp; other documents, site visits &amp; interviews                      Review of survey reports &amp; equip. &amp; facility input lists                      Review of training, survey, personnel &amp; equipment records.</p>	<p>Assumptions for achieving purpose:                      - Women can be recruited and trained as PHC providers                      - LDAs continue to give high priority to PHC.                      - People will accept and support a primary health care system.</p>
<p>Outputs:                      Health &amp; Health Facility Surveys                      Operations and Procedures Manuals for PHC Systems                      Sets of Task analysis &amp; Competency based Training curricula for PHCs and LBAs                      PHCs trained, certified &amp; employed                      LBAs trained, certified &amp; working                      PHC seminars and workshops for MOH and other personnel                      Long/Short Term trng in PHC management                      Media program for PHC info &amp; Support                      Housing for Trainees provides</p>	<p>Magnitude of Outputs:                      1 baseline/2 followup health surveys; 1 facilities survey                      Manuals developed and tested                      analysis and curricula                      80 PHC Workers                      75 LBAs                      25 seminars                      9 longterm; 38 prs months short term                      1 coordinated set of programs for community PHC &amp; health care support;                      1 T.V. broadcast facilities strengthened; 3 media surveys                      1 housing unit completed</p>	<p>Review of all materials, of manuals &amp; of reports on their use &amp; validations                      Review of training, testing &amp; certification records &amp; reports                      Review of survey reports                      Inspection of facility &amp; equip., review of records, &amp; interviews with staff.</p>	<p>Assumptions for achieving outputs:                      - MOH Central and Governorate levels act on stated priorities by providing support for PHC system development                      - MOH incentives sufficient to recruit and retain training, management, and outreach staff.                      - Appropriate candidates can be found and learn sufficient English to satisfy program requirements</p>
<p>Inputs: U.S.                      Tech Asst (total 15 person years)                      Mng/Admn Specialist (5 years)                      Trng Specialist (5 years)                      Health Survey Specialist (2 years)                      Media Specialist (12 months)                      Other Short Term                      Training (in-country) U.S. &amp; 3rd country                      Commodities - Vehicles                      - Medical Equipment &amp; Supplies                      - Trng Equipment &amp; Supplies                      Other - Completion of housing                      - Local hire Project Support Staff                      MOH/YARG                      Training (in-country)                      Training Project Staff                      MOH Health Workers Salaries                      Training Incentives                      Training (out-country)                      Salaries of trainees                      Local Admin &amp; Tech Staff                      Training/Project &amp; health workers staff salaries and support                      Commodities - Equipment/maintenance for facilities                      - Drugs/Supplies for facility                      - Petrol                      - Media/T.V. time                      - Health Education materials                      Construction/Facilities                      Existing Health Centers, Sub Cntrs, PHC units                      Project Offices at Gondar</p>	<p>Implementation Target (Type and Quantity)                      3 Surveys completed in 1983, 1985, 1987                      1 facilities and equipment inventory (Fall 1982)                      Systems design and procedures manuals for PHC - draft by 1985, final 1986                      80 Primary Health Care workers and 75 LBAs trained and certified by June 1987, PER MOH guidelines                      9 LT and 38 IN ST training completed by 1987                      Series of TV health education spots produced and in use by 1986.                      Equipment in place</p>	<p>Site visits, observations, &amp; interviews with MOH officials &amp; representatives of multi-lateral agencies (e.g., WHO, UNICEF, &amp; World Bank)                      Review of survey reports                      Review inventory reports                      Review manuals, reports on MOH use and acceptance                      Training, testing, certification records. MOH personnel actions recorded                      Project, MOH, training institution records and reports                      TV program schedules, consultant reports, facility and equipment inspection.</p>	<p>Assumptions for providing inputs:                      MOH and TA staff will be able to recruit and train survey staff.                      MOH will support development of new manuals.                      Trainees can be recruited, will complete training, work for MOH when certified.                      LT and ST training candidates and appropriate institutions can be identified.                      Ministry Information will accept new materials for health education.</p>
<p>Construction/Facilities                      Existing Health Centers, Sub Cntrs, PHC units                      Project Offices at Gondar</p>	<p>Other Donors:                      UNICEF: Initial supply of basic drugs, supplies and equipment for PHC units, vehicles</p>		

PROJECT MONITORING AND EVALUATION ACTIVITIES

PROJECT ACTIVITY	MONITORING ACTIVITIES (TIMING AND INDICATORS)	EVALUATION ACTIVITIES	NATURE AND TIMING OF REVIEWS
<u>Primary Health Care Worker Training</u>			
1. Primary Health Care Workers	-Task analyses completed, curricula draft versions tested and in use by January 1984	Curricula reviewed and compared to job descriptions, results of surveys to ascertain relevance of curricula to needs of community, skills required to meet those needs.	Annual review of progress in curriculum development and training outputs February, 1984, 1985, 1986 Final evaluation as described in June, 1987.
2. Local Birth Attendants	-Final versions drafted, tested and in use by January 1986		
3. Community Health Promoters	-Training of various workers completed according to schedule developed according to MOH guidelines. Approximately 80 PHCW and 75 LBA's to be trained and certified and working by June, 1987		
4. Trainer/Supervisors			
5. Others			
<u>Primary Health Care Support Systems</u>			
1. Training, including Inservice	Operation procedures manuals drafted by January 1985 (partially tested and in use). Final versions (use-tested by January 1986)	Manuals reviewed and compared to job descriptions and work observed to determine relevance of manuals to operational needs	Preliminary Review in February, 1984 Complete Review during Final Evaluation
2. Supervision			
3. Supply/Logistics			
4. Cost Control			
5. Transportation			

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PROJECT ACTIVITY	MONITORING ACTIVITIES (TIMING AND INDICATORS)	EVALUATION ACTIVITIES	NATURE AND TIMING OF REVIEWS
<u>Surveys</u>			
1. Baseline survey and 2 follow-up surveys with information useful for planning health programs	Baseline survey completed by August 1983 Follow-up surveys by 1985, 1987	Review survey results and health programs to determine correlation of survey results with service	Progress Review in Evaluation 1984
2. Facilities survey to determine needs per MOH plan for Basic Health Services	Survey planned by October 1982 Survey completed by January 1983	Evidence of use of survey results to plan health services	Complete Review in Final Evaluation  Progress Review in Evaluation February 1984; Complete review in Final Evaluation
<u>Media Health Education</u>			
1. Market research	1983, preliminary market survey completed analyzed and reported, 1984, 1985, 1986, 1987 audience information/impact surveys 1984-1986 - Videotapes/radio programs and other media materials which explain and support primary health care, development of community and individual ability to restore, maintain and improve health status needs identified by media experts (short-term T.A.) Existing broadcast facility provided with supplementary equipment and staff trained to permit ongoing production of TV health information programming	Analysis of audience impact surveys  Review quality of messages and relevance to problems revealed in service statistics, baseline and follow-up surveys	Surveys reviewed as they are completed  Media programs reviewed during 1984 and final evaluation
2. Design and Production			
3. Equipment		Equipment properly used to design and produce health education materials	

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PROJECT ACTIVITY	MONITORING ACTIVITIES (TIMING AND INDICATORS)	EVALUATION ACTIVITIES	NATURE AND TIMING OF REVIEWS
<p>4. Training</p> <p><u>Participant Training</u></p> <p>Long Term - 9 participants Complete long term training outside Yemen in subject areas re- quired by Primary Health Care Program activities</p> <p>Short term - 38 person months of short term training outside Yemen (completed by approximately 20 participants) in skills required for Tihama Primary Health Care Project</p>	<p>Short term participant training provided to media staff according to need for design and production of health education materials (see participant Training Schedule)</p> <p>Selection and Placement records 3 returns by 1/85 6 return by 1/86 9 returns by 1/87</p> <p>20 person months scheduled or completed by January, 1986, 38 by January 1987</p>	<p>Returnees appropriately trained and working in positions commensurate with training</p> <p>Review of staff, training completed, job requirements and relevance to training received</p> <p>Returnees appropriately trained and working in Tihama project in positions commensurate with training</p> <p>Review of staff, training completed, job requirements and relevance to training received</p>	<p>Progress Review of February 1984</p> <p>Progress Review in Evaluation February 1984; complete re- view in final evaluation</p> <p>Progress Review in Evaluation of February 1984; Complete review in final evaluation</p> <p>Progress Review in Evaluation February 1984; complete re- view in final evaluation</p>

Appendices. Social Science Survey

Part I. Vignettes of PHCW and LBA trainees.

PHCW Graduate A Qutay

PHCW Graduate B Lawiyah

LBA Dropout A Qutay

Part II. Social Profile Information

PHCW Trainees.

Hodeidah

Zaydiyyah

Part III. Village Profile

Deir Mehdi.

VignettePHCW GRADUATE A

SALEM ALI IBRAHIM. QUTAY VILLAGE (4490 in 75 census; estimate today up to 10,000.)

MARAWI'AH nahiyya. (Hodeidah)

Established in temporary unit with M.D.,  
MOH nurse, mobile unit.

Salem trained in 1981 after he finished sixth grade. He is 18 and has one younger (7 years) sister. His father died in a car accident two years ago enroute from a wedding celebration. His mother does some seamstress work to help support the family.

Salem was surprised that his course contained so much preventive and so little curative training, but says that he has become more convinced in the need for preventive care. He had originally thought of going to nursing school, and now would like to work "in the company" of an M.D. (though certainly not a nurse) to "get more education". He would probably accept almost any situation that would rid him of the present antagonistic relation with the MOH nurse; when asked if he would work on his own as a PHCW in a nearby village he indicated interest in doing so in Deir Khalal across the road. (This village had a PHCW recruit with only a 5th grade level; he is currently working in an ice factory. It appears that he was, perhaps would, be willing to complete the sixth grade.)

Salem and the MOH nurse Ahmad, predictably, do not get along. Ahmad has practiced for 17 years (after MOH- three years or less- training). Originally from Bayt Faqi, he has worked in Zaydiyya, Hodeida, and has been here for 7 years. His off-work practice, and that of another "nurse" provide the main options for the people of Qutay when the Sudanese M.D. (who comes 3 days a week) or the mobile unit is not there. The two nurses were the only individuals mentioned by several women questioned about health care resorts.

When asked how work was divided in the clinic, the three professionals said:

the M.D. examines; the nurse does dressings and injections; the PHCW does diagnosis (tashkhis al amrad, which in this context does not carry the clinical connotations that diagnosis usually has, but probably means that the PHCW can only talk) and preventive care. When asked in private about his relations with the nurse, the PHCW complained of sarcastic references to the PHCW as "the doctor" and statements to PHCW clients that they would die, e.g., from the chloroquine the PHCW was prescribing.

## PHCW TRAINEES SOCIAL PROFILE

Zaydiah 1982 Trainees

(Partial Sample)

NAME OF TRAINEE	Muhammad Shown Ahnlal	Ali Maghrah Othair	Ali Alala	Muhammad Ali Makrani
AGE	17	20	19	18
VILLAGE/NAHIYYA	Deir Mahdi/Zaydiah	Al-Mirwagh/Al-Zohra	Al Khamis/Al-Zohra	Al-Hoteria/Al-Luhayya
LEVEL OF EDUCATION	6th & 2 mos. at Inst.	6th	6th	6th
ACTIVITY BEFORE TRAINING	Studied typing & accounting 2 months in Hodeida	Agriculture Delivers on motorcycle	In preparatory school/Helped watching sheep	---
SALARY OF OTHER JOBS HELD	---	100-500 riyals/month	Spends 1000 riyals from father/month	---
PREVIOUS EXPERIENCE IN HEALTH CARE	---	---	---	---
FURTHER TRAINING DESIRED AFTER THIS COURSE	No further training if we understand our tasks	No need	In spare time, preparatory school/ studied on own	Study at home
FATHER'S WORK/OFFICE	Qat Seller	Agriculture	Agriculture	Agriculture/Village Shayth
UNCLE OFFICE/ WORK	(Maternal) Has transport cars	Motorcycle transport	---	Sheep traders/ President of Hoteria Coop
OTHER RELATIVE OFFICE (Grandfather may not be literal father of father)	Grandfather is Village Aqil	---	---	---
POSITION IN FAMILY	Oldest	Middle	Middle	Oldest
BROTHERS	4	3	2	5
SISTERS	2	3	3	6
BROTHERS IN SCHOOL	2	Other brothers in Agriculture	---	3 in school
SISTERS IN SCHOOL	0	0	0	1 (?)
FEMALE EDUCATION IN VILLAGE	0	0	0	Quranic Study
OTHER COMMENTS			All from Marwal, but will work in Khamis	

PHCW TRAINEES SOCIAL PROFILE  
Hodeida 1982 Trainees

NAME OF TRAINEE	Farsal Muhammed Yahya	Ahmad Pasha Abdullah	Issah Ibn Issah Ahmad	Ahmael Ali Ahmad
AGE	21 (?)	17	20	17
VILLAGE/NAHIYYA	Al-Hassiya/Al-Mansuriyah	Al-Baheih/Bajil	Al-Mukamaniyah/Al-Dureihimi	Al-Kamariyah/Bajil
LEVEL OF EDUCATION	6th	6th	6th	6th
ACTIVITY BEFORE TRAINING	Laborer in Saudia	School	Agriculture	School
SALARY OF OTHER JOBS HELD	1,500 Riyal/month	---	(Agriculture)	---
PREVIOUS EXPERIENCE IN HEALTH CARE	---	Watched clinic with friend	---	---
FURTHER TRAINING DESIRED AFTER COURSE	M.D.	M.D.	Remain PHCW	Become M.D. if another PHCW replaces
FATHER'S WORK/OFFICE	Agriculture	Agriculture	Guard in factory	Agriculture coop member/Village security
UNCLE OFFICE/WORK ("am", which may not be literal father's brother)	teacher ma'mun	---	Village Sheith Coop member	Cotton company in Hodeida (admin?)
OTHER RELATIVE OFFICE/WORK	President Nahiyya LDA	Coop member Village secretary	---	---
POSITION IN FAMILY	Youngest	Youngest	Next to oldest	Oldest
BROTHERS	2	2	3	3
SISTERS	1	2	4	4
BROTHERS IN SCHOOL/WORK	Work	Secretary agriculture	School	One in school
SISTERS IN SCHOOL	0	0	0	School (fourth grade)
FEMALE EDUCATION IN VILLAGE	0	0	0	To sixth
OTHER COMMENTS		Replaced his brother, Youssef, when Youssef got a grocery store job	Married	

## Hodeida 1982 Trainees

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NAME OF TRAINEE	Abdullah Sagger	Abdu Alaned Abdel	Abdu Omar Salem	
AGE	17	34	18	
VILLAGE/NAHIYYA	Al-Redd/Al-Mansuriyah	Deir Daoud/ Al-Mansuriyah	Kadf Zumailah/ Bajil	
LEVEL OF EDUCATION	6th	6th	6th	
ACTIVITY BEFORE TRAINING	In first class of preparatory	Work in Saudia	School	
SALARY OF OTHER JOBS HELD	(School)	3-4,000 riyals/month	---	
PREVIOUS EXPERIENCE IN HEALTH CARE	---	---	---	
FURTHER TRAINING DESIRED AFTER COURSE	Learn diagnosis, injection, ultimately M.D.	Nurse	M.D.	
FATHER'S WORK/OFFICE	Agriculture	Agriculture (formerly)	Agriculture/village ma'mun (registrar)	
UNCLE OFFICE/WORK ("am", which may not be literal father's brother)	Village Aqil	---	Cement factory (admin?)	
OTHER RELATIVE OFFICE/WORK	Coop member	Coop member (brother) Village sec'y (brother)	School director (brother)	
POSITION IN FAMILY	Oldest	Next to youngest	In middle	
BROTHERS	4	4	4	
SISTERS	2	1	7	
BROTHERS IN SCHOOL/WORK	School (1) Agriculture	2 teachers 2 working in Saudia	2 in school	
SISTERS IN SCHOOL	0	0	0	
FEMALE EDUCATION IN VILLAGE	0	0	0	
OTHER COMMENTS	Reports age as 17; looks 12-14; grand-father, not uncle, is Aqil	Married for 12 years		

VignettePHCW GRADUATE B

MUHAMMAD YAHYA. AL LAWIYAH (939 in 75 census.)

Al-Dureihimi nahiyya. (Hodeidah)

Established in temporary unit donated by the businessman owning the adjoining hotel (place to smoke and chew qat); the agricultural coop provided screens, floor covering, water (aluminum double sink into bucket), and wood partition setting off women's section, for around 1,000 riyals, according to the PHCW. He said he would like to have a fan but there is only electricity in the evening.

Other available services in Lawiyah are a MOH nurse (Ibrahim Wasili), who lives in Lawiyah but is not as prominent at the unit as Ahmed is in Qutay, and assorted midwives and injectionists.

(Two other PHCWs were recruited from Lawiyya and dropped; one, who had been practicing informally before, went into the army; one, who had 5th grade level, went to Saudi Arabia.)

To enter training, Muhammad left the agricultural cooperative where he had worked giving advice to agriculturalists, receiving training himself once a week (lectures given at Kilo 16). Before that he had worked for five years in the Water Department, but although he was earning 1,500 riyals a month (versus his 1,000-1,500 salary now as a PHCW), he said that there was no security in the water department job. Before that he had driven a tractor for his uncle at his farm in nearby Abbas, a village known for its jasmine.

Muhammad is 28 years old and has two brothers in 5th and 1st grades, and a toddler (3) sister. His father is now retired from his work as a gardenia merchant.

In line with his past work, Muhammad says that the most important thing that he learned in the PHCW curriculum is "guidance (irshad) of people". He has started health education by giving speeches in the mosque on Fridays. Since no self-respecting woman would dare come to the clinic in its present location by the hotel, (Muhammad mentioned the need for a location "among the houses" for the unit), Muhammad has begun to make home visits to care for women.

Muhammad sees approximately ten (all men, since the clinic is next to a hotel) people a day in his unit. He estimated that on the average

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4 of the clinic visits would be for malaria, 2-3 for wounds, and 2 for skin infection. He makes two or three visits in the afternoon to women who send for him. On these visits he treats and gives prenatal and nutritional advice. Seasonal variations mean more gastrointestinal problems (in home visits to infants) in the summer, for instance; he said that this spring urine infections sometimes composed half of his patients' complaints. Clinic records of a May day when only the PHCW was in the unit, (picked out of the hat and not scientifically) indicated the following complaints: 3 wounds, 2 colds, 1 malaria, 1 colic, 1 fatigue.

VILLAGE PROFILEDEIR MEHDI (MUGHLIFF nahiyya).

Deir Mehdi is one of the villages (population 970 in 75 census) which is most committed to the obtaining of health services. The village and the LDA are sponsoring a PHCW trainee who is the star of his Zaydiyyah class. Before he joined training in April 1982 he was studying typing and accounting in Hodeidah after 6 years of education; not surprisingly, his grandfather is the agil of the village. The village wants to build a health unit. According to reports, the vast majority of the men of the village are in Saudi Arabia and send remittances home. The village's close proximity to Saudi makes this more feasible or at least easier than in the more southern Tihama. In this part of the Tihama, local markets display truckloads of goods brought over the border from Saudi Arabia. Deir Mehdi seems to be more prosperous than some other villages, although this is not necessarily the explanation for its greater interest in health.

Deir Mehdi has a PHCW in training, and a Zaydiyyah clinic employee (Fadl) has recently returned from Hodeidah and moved his family to his home town of Deir Mehdi. Fadl is a MOH "nurse" at Zaydiyyah, but will inevitably strike up a practice in Deir Mehdi as well. There are/is at least one traditional midwife and probably some injectionists. Health crises are referred elsewhere; Deir Mehdi is close to the main road. Last year, the daughter of in law of the agil gave birth at 5 to 6 a.m. and had died from hemorrhaging by the time Zaydiyyah staff were brought by 9 or 10 a.m. It should be noted that in the interim a "nurse" in Zaydiyyah had refused to come and the Sudanese nurse in Hodaydayya had not been found at home.

Deir Mehdi seems to be more prosperous than some other villages, although this is at best a partial explanation for its greater interest in health. An issue which cannot be resolved here is why villages differ in their willingness to institute PHCW and LBA training support and units. The author will pick Mughliff not by virtue of any scientific scheme of comparison but because the author happened to visit it and found the local leaders extremely uninterested in supporting training or units. The shaykh of the LDA stated upon questioning that health was the third priority for the LDA (behind water and agriculture) but that Mughliff did not want a health center, PHCW or LBA trainees. There is little hope or reason to negotiate the same without the local notable's blessing, particularly when he is head of the entire nahiyya LDA. When asked what women did when they had health emergencies, he said that in birth, e.g., they would just die, but that last year he had forced three women who would have otherwise died to go to Zaydiyyah.<sup>1</sup> This may be due to political (as well as personality) considerations, to conservatism (this of course is hard to measure; neither village, e.g., has any education for girls), or to the fact that Mughliff lies in the interior of the Tihama plain, at the foot of the mountains (about an hour drive from the main road, from which Deir Mehdi lies 10 minutes). The explanation may

also simply be that residents (mainly male) of Mughliff can go the nearby village of Hudaydiyya where there is a 3 year trained Sudanese nurse, or an eastern European doctor in another village nearby. However, at the same time, it could be said that people of Deir Mehdi likewise have their nearby resort of Zaydiyyah. Clearly, the explanation is multi-dimensional.

<sup>1</sup>The shaykh mentioned in the conversation that when he had sponsored a meeting of UNICEF with village women in his house, the people accused him of doing "evil things with women in his house." The shaykh said: "We're bedouin; we are not ready for females in education and training."

REQUEST FOR SOURCE & ORIGIN WAIVER FOR VEHICLES

Approximate Value: \$60,000 (6 vehicles X \$10,000)

Origin: Japan

Probable Source: Yemen Arab Republic

The Tihama Primary Health Care Project (279-0065) will require six (6) project funded vehicles for use by supervisory health teams and project personnel. The project supports a rural health program in the Tihama region. The U.S. contractor personnel as well as Yemeni supervisory/training teams will have extensive contact with the isolated rural villages of the Tihama for recruiting and supervising health workers. Most of the villages in the project area are not served by paved roads, and vehicle maintenance is a continuous problem. In addition, the Ministry of Health is developing a vehicle maintenance program in the Tihama, but it is geared to Japanese made vehicles which make up most of their motor pool. UNICEF is also contributing vehicles to this (and other primary health care programs in Yemen) and they will be providing Japanese made vehicles.

In seeking the vehicles for this project, both U.S. manufactured four-wheel drive and Japanese manufactured vehicles were considered. Criteria for selection included: (1) availability of spare parts; (2) availability of qualified mechanics; and (3) speed at which parts can be provided when not locally available. An earlier project in Hodeidah (Applied Health/Nutrition) was unable to maintain its 2 U.S. four wheel drive vehicles. Japanese made vehicles (Toyota/Nissan) are readily available in Yemen as well as good quantities of spare parts and trained mechanics.

3002 Listed below are statutory criteria applicable generally to projects with FAA funds and project criteria applicable to individual fund sources: Development Assistance (with a subcategory for criteria applicable only to loans); and Economic Support Fund.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE?  
HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT

1. FY 79 App. Act Unnumbered; FAA Sec. 633 (b); Sec. 634A. (a) Describe how Committees on Appropriations of Senate and House have been or will be notified concerning the project; (b) Is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that figure)?
  - a. Normal AID procedures which includes AID's annual Congressional presentation.
  - b. Yes
2. FAA Sec. 611(a) (1). Prior to obligation in excess of \$100,000, will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost of the U.S. of the assistance?
  - a. Yes
  - b. Yes
3. FAA Sec. 611(a) (2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?
  - a. None required
4. FAA Sec. 611(b); FY 79 App. Act Sec. 101. If for water or water-related land resource construction, has project met the standards for planning Water and Related Land Resources dated October 25, 1973?
  - a. Not applicable
5. FAA Sec. 611(a). If project is capital assistance (e.g. construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?
  - a. Not applicable

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6. FAA Sec. 209. Is project susceptible of execution as part of regional or multilateral project? If so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.

- a. Yes
- b. Other donors are carrying out discreet activities in the sector area. UNICEF will participate in project.

7. FAA Sec. 601(a). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

- a. Limited extent
- b. Encourages private initiative
- c. Yes
- d. Yes
- e. N/A
- f. Limited applicability

8. FAA Sec. 601(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

Project is partially designed to support U.S. private enterprise. Project will utilize U.S. contractor. Goods will be procured in U.S. otherwise effects marginal.

9. FAA Sec. 612(b); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.

- a. Project agreement contains covenants requiring host country financial/in-kind contribution.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

- a. No

11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

- a. Yes

12. FY 79 App. Act Sec. 608. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely

- a. N/A

to cause substantial injury to U.S. producers of the same, similar, or competing commodity?

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b); 111; 113; 281a.  
 Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

- a. Extensively
- b. Moderate
- c. Moderately
- d. Extensively
- e. Minimal

b. FAA Sec. 103, 103A, 104, 105, 106, 107. Is assistance being made available; (include only applicable paragraph which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.)

(1) (103) for agriculture, rural development or nutrition; if so, extent to which activity is specifically designed to increase productivity and income of rural poor (103A) if for agricultural research, is full account taken of needs of small farmers;

(2) (104) for population planning under sec. 104(b) or health under sec. 104(c); if so, extent to which activity emphasizes low-cost, integrated delivery systems for health, nutrition and family

- 1. Project will include nutrition education and extensive education on preventive and community health which will increase rural productivity.
- 2. Project will have family planning component which stresses child spacing and nutritional information dissemination along with primary health care delivery.

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 planning for the poorest people, with particular attention to the needs of mothers and young children, using paramedical and auxiliary medical personnel, clinics and health posts, commercial distribution systems and other modes of community research.

(3) (105) for education, public administration, or human resources development; if so, extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, or strengthens management capability of institutions enabling the poor to participate in development;

Project contains an adult education/training element for the rural poor who will participate in the project as primary health care workers and local birth attendants.

(4) (106) for technical assistance, energy, research, reconstruction, and selected development problems; if so, extent activity is:

(i) technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;

N/A

(ii) to help alleviate energy problems;

N/A

(iii) research into, and evaluation of, economic development processes and techniques;

N/A

(iv) reconstruction after natural or manmade disaster;

N/A

(v) for special development problem, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance;

N/A

(vi) for programs of urban development, especially small labor-intensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development.

N/A

c. (107) Is appropriate effort placed on use of appropriate technology?

a. YES

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least-developed" country)?

a. YES

e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to the Congress been made, and efforts for other financing, or is the recipient country "relatively least developed"?

a. N/A

f. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental and political processes essential to self-government.

a. Project support YARG desire for nationwide primary health care system. Majority of inhabitants live outside urban areas and need education/care on

g. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

a. Yes, by providing Yemenis better health care, less illness will give a corresponding higher productive capacity to individual.

2. Development Assistance Project Criteria (Loans Only)

a. FAA Sec. 122(b). Information and conclusion on capacity of the country to repay the loan, including reasonableness of repayment prospects.

a. N/A

b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete in the U.S. with U.S. enterprise, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

a. N/A

3. Project Criteria Solely for Economic Support Fund.

a. FAA Sec. 531(a). Will this assistance support promote economic or political stability? To the extent possible, does it reflect the policy directions of section 1027

a. N/A

b. FAA Sec. 533. Will assistance under this chapter be used for military, or paramilitary activities?

a.. N/A

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SG(3) Listed below are statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of goods and services financed? YES
2. FAA Sec. 604(a). Will all commodity procurement financed be from the U.S. except as otherwise determined by the President or under delegation from him? YES
3. FAA Sec. 604(d). If the cooperating country discriminates against U.S. marine insurance companies, will agreement require that marine insurance be placed in the United States on commodities financed? YES
4. FAA Sec. 604(a). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? N/A
5. FAA Sec. 608(a). Will U.S. Government excess personal property be utilized wherever practicable in lieu of the procurement of new items? YES
6. FAA Sec. 603. (a) Compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates. YES

7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis? YES

If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs? YES

8. International Air Transport. Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will provision be made that U.S.-flag carriers will be utilized to the extent such service is available? YES

9. FY 79 App. Act Sec. 105. Does the contract for procurement contain a provision authorizing the termination of such contract for the convenience of the United States? YES

B. Construction

1. FAA Sec. 601(d). If a capital (e.g., construction) project, are engineering and professional services of U.S. firms and their affiliates to be used to the maximum extent consistent with the national interest? N/A

2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable? YES

3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the United States not exceed \$100 million? N/A

C. Other Restrictions

1. FAA Sec. 122 (e). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? N/A

2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights? YES

3. FAA Sec. 620(h). Do arrangements preclude promoting or assisting the foreign aid projects or activities of Communist-bloc countries, contrary to the best interests of the United States? YES

4. FAA Sec. 636(i). Is financing not permitted to be used, without waiver, for purchase, longterm lease, or exchange of motor vehicle manufactured outside the United States, or guaranty of such transaction? NO

5. Will arrangements preclude use of financing:

a. FAA Sec. 104(f). To pay for performance of abortions or to motivate or coerce persons to practice abortions, to pay for performance of involuntary sterilization, or to coerce or provide financial incentive to any person to undergo sterilization? YES

b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? YES

c. FAA Sec. 660. To finance police training or other law enforcement assistance, except for narcotics programs? YES

d. FAA Sec. 662. For CIA activities? YES

e. FY 79 App. Act sec. 104. To pay pensions, etc., for military personnel? YES

f. FY 79 App. Act Sec. 109. To pay U.N. assessments? YES

g. FY 79 App. Act Sec. 107. To carry out provisions of FAA sections 209(d) and 251(h)? (Transfer of FAA funds to multi-lateral organizations for lending.) YES

h. FY 79 App. Act Sec. 112. To finance the export of nuclear equipment, fuel, or technology or to train foreign nations in nuclear fields? YES

i. FY 79 App. Act Sec. 601. To be used or publicity on propaganda purposes within cited States not authorized by the Congress? YES