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EVALUATION REPORT

ON

AID'S PARTICIPANT TRAINING EFFORTS IN THE YEMEN ARAB REPUBLIC

Revised August, 1977

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I. INTRODUCTION

During March 1977, a team of three went to the Yemen Arab Republic to evaluate the AID Development Training Project 020. The team members were (1) Annette Binnendijk, Program Analyst from the Office of Development Planning, Bureau for the Near East, AID, (2) Marilyn Sharif, Statistician from the Regional Staff, U.S. Bureau of the Census, and (3) David Kinsey, a Middle East Education Specialist from the University of Massachusetts. Annette Binnendijk was the team coordinator.

The purpose of the trip was to perform the tasks outlined in a scope of work developed in November 1976. The scope stated as the objective:

"to provide information on which the current participant training program can be evaluated and to provide a basis on which a second project can be structured so as to effectively respond to training needs in the Yemen Arab Republic." 1/

Specific tasks from the scope of work were allocated among the team members prior to departure based on each individual's specializations.2/

The evaluation report is divided into three parts. I. Evaluation of the Development Training Project 020; II. Manpower Planning in the Yemen Arab Republic; III. Alternatives and Recommendations for the new Development Training Project 040.

1/ See Development Training Project II for the YAR, Scope of Work, November 8, 1976, in Appendix.

2/ For the division of tasks, see the Trip Report, April 19, 1977, in Appendix.

PART I

EVALUATION OF THE DEVELOPMENT TRAINING PROJECT 020

This part of the report has three major sections: (1) an examination of the project's initial intentions as stated in the project paper and an evaluation of the realization of its objectives, (2) a description of the results of interviews with returned participants who were trained under the project, and (3) an evaluation of the roles and responsibilities of institutions involved with the project.

A. PROJECT INTENTIONS AND REALIZATION OF OBJECTIVES

1. Initial Visions of the Project's Goal, Purpose, Outputs and Inputs

The project paper for the Development Training Project 020 stated its goal and purpose to be as follows:

"The long-term goal of this project is a public service exposed to modern management and administrative techniques, and as a result of this exposure, more capable of meeting the operational and administrative responsibilities of a modernizing society."

"The short-term objective is to provide management and technical training to selected government and private sector officials who will occupy positions of responsibility in those YAR ministries, agencies and institutions directly concerned with economic development and resource management."

"The purpose of this project is strengthening the YAR government and private sector services through participant training of middle management and senior level officials. Specifically, training to complement that of indigenous institutions and American University of Beirut (AUB) will be provided abroad in

such areas administration, finance, economics, statistics, planning and development as well as technical specialities that are job related. This project will support and be part of an effort by the YAR to develop a career training program based on the coordination of all foreign training opportunities." 1/

The project's outputs were to be (1) trained manpower in administrative and technical fields, and (2) the development of a career training program and of centralized government machinery for selecting, monitoring, and placing trainees in accordance with YAR development priorities. The product of this project was to be part of a concerted program of overseas training coordinated by the YARG with all other donor sources.

The estimated cost of the project for the fiscal years 1973 to 1977 was to be \$1,584,000. The major input was to be approximately 25 new participants starting their training every year, of which about half was to be non-academic and observational visits and half was to be academic programs for degrees. The training was to take place either in the U.S. or in Arab-speaking third countries. Other inputs foreseen in the project paper were short-term consulting services to assist the YARG in establishing and managing the training program and in development of their yearly training program, and a local hire for AID to help with the daily implementation of the project.

The project paper left many responsibilities affecting the success of the project with the YARG. Specifically, the government was responsible for:

- (1) creating a central point of coordination in the government

1/ See Training for YAR Development; Non capital Project Paper, page 1.

responsible for determining training requirements and for arranging these requirements in priority order according to economic development objectives.

(2) institutionalizing the means for determining the number or validity of overseas training requirements, as well as the nomination, testing and screening of qualified candidates for training.

(3) development of a system to assure return of such trainees upon completion of their training overseas and to guarantee full utilization of their services and their training experience upon their return.

2. Realization of Project Inputs and Outputs

Having outlined the initial intentions of the training project 020, we now will examine what was realized.

The actual project expenditures by fiscal year looked as follows:

<u>Project 020</u>			
<u>Obligations and Expenditures</u>			
<u>(in thousands of US \$)</u>			
<u>Fiscal Year</u>	<u>Obligations</u>	<u>Deobligations</u>	<u>Expenditures</u>
1973	105	0	0
1974	275	- 17	102
1975	250	- 14	268
1976	279	- 1	213
Transition Quarter (July 76-Sept. 76)	250	- 18	148
1977 (Oct. 76-Dec. 76)	400	0	220
	<u>1559</u>	<u>- 50</u>	<u>951</u>

The number of participants that commenced training in each fiscal year averaged about 34, but there were no new starts in the first year, FY 1973, and thereafter the number of new starts tended to rise. In total, under the 020 training project, 168 participants had commenced training between/^{FY}1973 and 1977. Of these, 92 were sent to the United States and 76 were sent to third countries for training. (See table 1).

Of the 168 participants that started training, 3 dropped out, 66 completed their training and the remaining 99 are expected to complete their training in the next few years. (See table 2).

The participants have been trained in a variety of fields, with the greatest emphasis in agricultural sciences, mechanics maintenance, engineering, public administration, business administration and economics. Of the 66 that have completed their training, all were in non-degree programs.^{1/}Of the 99 currently in training, 20 are in non-degree programs, 67 are in undergraduate programs and 12 are in masters programs. There has been a trend moving away from non-degree and into degree programs in the 020 project. (See table 3).

The 66 participants who have completed their training were employed or sponsored by a variety of 17 different Government Ministries, as well as a few by the AID Mission. The highest number of Government participants come from the Highway Authority, Ministry of Public Works, Central Planning Organization, Yemen Bank and Yemen Airways. (See Table 4). The 99 participants currently in training were sponsored by 18 various Ministries,

^{1/} Although one received an advanced professional degree.

though the concentration is greatest in the Ministry of Agriculture and the Ministry of Education. ^{1/} (See Table 5). Except for one of the participants from the private sector and 9 from the AID Mission, all were employees of the YARG.

Another input, visualized in the project paper but never realized, was the services of consultants for two months per year. The tasks of the consultants would have been to advise the YARG (a) on the qualifications and requirements of educational institutions, and (b) on the formation of the central government selection criteria, training priorities, working procedures for a selection committee and the initial development of training programs for the ministries identified for priority attention. In the absence of consultants, the task of choosing institutions to match a nominee's desired training program was delegated to the Office of Development Training in AID/Washington for those participants going to the U.S. In the case of third country

^{1/} 48 participants are studying agriculture at Egyptian undergraduate schools and will return to work in the Ministry of Agriculture. The 21 participants categorized as from the Ministry of Education is somewhat misleading; 19 are transferred former AUD students.

training, the procedure was to send the AID Mission's program officer to inspect the institutions prior to choosing them for AID training. The second task that the consultants were to fulfill, of assisting the YARG in centralizing and coordinating their training programs, was unfortunately never supported. This has contributed to weaknesses in the YARG training system and has affected the level of success, not only of project 020 but also of other donor training programs that depend upon the YARG's capacity to effectively determine training priorities, select qualified candidates, coordinate the various donor training opportunities and ensure utilization of training upon return.

The effectiveness of short-term consultants working with and training Yemeni counterparts in the CPO might have been hampered by the high turnover in their staff. Maintenance of continuity of personnel is a serious problem in the YARG.

Table 1. Participants by Fiscal Year of Commencement of Training and Location of Training (as of April 1, 1977)

<u>Fiscal Year of Commencement of Training</u>	<u>Total</u>	<u>U.S. Participants</u>	<u>Third Country Participants</u>
1974	36	10 ^{1/}	26
1975	19	19	-
1976	41	16 ^{1/}	25
Transition quarter (July 76-Sept. 76)	29	29	-
1977 (Oct. 76 to present)	43	18	25
Total *	168	92	76

^{1/} One participant recorded as having attended two training periods is recorded in this table twice.

* Excludes one person who never commenced training due to illness.

Table 2. Participants by Fiscal Year of Completion of Training and Location of Training (as of April 1, 1977)

<u>Fiscal Year of Completion of Training</u>	<u>Total</u>	<u>U.S. Participants</u>	<u>Third Country Participants</u>
<u>Participants Completed</u>	66 <u>1/</u>	40 <u>1/</u>	26
1974	3	3	-
1975	43	17 <u>1/</u>	26
1976	12	12 <u>1/</u>	-
Transition quarter (July 76 - Sept. 76)	6	6	-
1977 (Oct. 76 - present)	2	2	-
<u>Participants Expected to Complete</u>	99	51	48
1977 (present until end of Sept. 77)	18	18	-
1978	8	8	-
1979	36	12	24
1980	12	12	-
1981	25	1	24
<u>TOTAL*</u>	165	91	74

1/ One participant recorded as having attended two training periods is recorded in this table twice.

* Excludes four participants, three who are known to have dropped out and one who never commenced training.

Table 3: Participants by Field of Specialization, Completed and Current, Type of Training and Location of Training (as of April 1, 1977)

Field of Specialization	Total		Totals			US Participants			Third Country Participants		
	No.	Percent	Non-Degree	Bachelors	Masters	Non-Degree	Bachelors	Masters	Non-Degree	Bachelors	Masters
Participants-Completed	66 ^{1/}	100.0	65	-	1 ^{2/}	39 ^{1/}	-	1 ^{2/}	26	-	-
1. Agricultural Economics and Development	1	1.5	1			1					
2. Agricultural Sciences and Engineering											
3. Aviation	4	6.1	4			4					
4. Banking and Finance	11	16.7	11			11					
5. Business Administration/Management, Accounting, Economics	8	12.1	8			8					
6. Development, Planning, Computer Science, Statistics	7	10.6									
7. Engineering, Surveying & Drafting	11	16.7	10		1 ^{2/}	7 ^{1/}		1 ^{2/}	10		
8. English Language, Teaching/Education											
9. Mathematics Basic Sciences											
10. Mechanics, Maintenance	19	28.8	19			3			16		
11. Public Administration, Law	5	7.6	5			5					
Participants-Current	99	100.0	20	67	12	20	19	12	-	48	-
1. Agricultural Economics and Development	4	4.0		4						4	
2. Agricultural Sciences and Engineering	45	45.5		45			1			44	
3. Aviation											
4. Banking and Finance	3	3.0	3			3					
5. Business Administration/Management, Accounting, Economics	9	9.1		5	4		5	4			
6. Development, Planning, Computer Science, Statistics	4	4.0	2		2	2		2			
7. Engineering, Surveying & Drafting	8	8.1	2	5	1	2	5	1			
8. English Language, Teaching/Education	6	6.1	1	4	1	1	4	1			
9. Mathematics Basic Sciences	3	3.0			3			3			
10. Mechanics, Maintenance	3	3.0	3			3					
11. Public Administration, Law	14	14.1	9	4	1	9	4	1			
Participants-Total*	165	100.0	85	67	13	59	19	13	26	48	-
1. Agricultural Economics	5	3.0	1	4		1				4	
2. Agricultural Sciences and Engineering	45	27.3		45			1			44	
3. Aviation	4	2.4	4			4					
4. Banking and Finance	14	8.5	14			14					
5. Business Administration/Management, Accounting, Economics	17	10.3	8	5	4	8	5	4			

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Table 3 continued

Field of Specialization	Total		Total			US Participants			Third Country Participants		
	No.	Percent	Non-Degree	Bachelors	Masters	Non-Degree	Bachelors	Masters	Non-Degree	Bachelors	Masters
6. Development, Planning, Computer Science, Statistics	11	6.7	9		2	9		2			
7. Engineering, Surveying & Drafting	19	11.5	12	5	2	2	5	2	10		
8. English Language, teaching/Education	6	3.6	1	4	1	1	4	1			
9. Mathematics, Basic Science	3	1.8			3			3			
10. Mechanics, Maintenance	22	13.3	22			6			16		
11. Public Administration, Law	19	11.5	14	4	1	14	4	1			

1/ One participant recorded as having attended two training periods is recorded in this table twice.

2/ One participant received an Advanced Professional Degree in Civil Engineering.

* Excludes four participants, three who are known to have dropped out and one who never commenced training.

Note: Percentages may not add to 100.0 due to rounding.

Table 4. Completed Participants by Place of Employment or Sponsorship Prior to AID Training and Location of Training (April 1, 1977)

<u>Prior Place of Employment or Sponsorship</u>	<u>Total</u>	<u>US Participants</u>	<u>Third Country Participants</u>
Finance Ministry	1	1	
Ministry of Health	1	1	
Ministry of Interior	2	2	
Command Council	1	1	
Civil Aviation	1	1	
Confederation of Yemen Development Association (CYDA)	1	1	
Mohamed Ali Othman School	1	1	
Ministry of Education	2	2	
Yemen Salt Mining Company	1	1	
Central Bank	3	3	
Yemen Bank	7	7	
San'a Municipality	4		4
Taiz Water Authority	3	1	2
Yemen Airways	5	5	
Central Planning Organization (CPO)	8 ^{1/}	8 ^{1/}	
Highway Authority	8	4	4
Ministry of Public Works	8		8
USAID	9	1	8
TOTAL	66^{1/}	40	26

^{1/} One participant recorded as having attended two training periods is recorded in this table twice.

Table 5. Current Participants by Place of Employment or Sponsorship Prior to AID Training and Location of Training (April 1, 1977)

<u>Prior Place of Employment or Sponsorship</u>	<u>Total</u>	<u>US Participants</u>	<u>Third Country Participants</u>
Ministry of Interior	2	2	
Confederation of Yemen Development Association (CYDA)	1	1	
Ministry of Education ^{1/}	21	21	
Central Bank	2	2	
Yemen Bank	1	1	
Central Planning Organization (CPO)	5	5	
Highway Authority	2	2	
Ministry of Agriculture	48		48
Telama Development	1	1	
Cement Factory	2	2	
National Institute for Public Administration (NIPA)	1	1	
Yemen Airways (YACO)	1	1	
Central Organization for Control and Audit (COCA)	2	2	
National Water and Sewerage (NWSA)	2	2	
Ministry of Information	1	1	
Ministry of Finance	3	3	
San'a University	2	2	
Ministry of the Economy	1	1	
Unknown	1	1	
TOTAL	99	51	48

^{1/} Includes 19 former AID students.

A final input suggested in the project paper, that of the AID Mission hiring a local Yemeni to help implement the project, was fulfilled for a number of years. However, too little pay finally forced the individual to leave AID for a private sector job. The position has recently been upgraded and another Yemeni has been hired. An input not foreseen in the project paper but that later was considered, was AID financing of English teachers to teach English to nominees for AID training. An evaluation of the effectiveness of this input is given in Part C.

3. Evaluation of Project Impact on Purpose and Goal.

The realization of project 020's inputs and outputs is fairly evident; more difficult to determine is whether the outputs achieved their purpose and goal.

As stated above, the major purpose of the project was to help provide management and technical training to selected government and private sector officials who would occupy responsible positions in YAR ministries and institutions directly concerned with economic development and resource management. Some important questions in evaluation of success are thus: (1) Were those individuals selected for training in priority fields and ministries? (2) Did they return to responsible positions in these priority ministries? (3) Did they utilize their training? (4) Were they able to transmit what they learned to others? (5) Are they planning to remain in their current employment? In helping to evaluate some of these questions, interviews were taken of those participants from project 020 who had returned. 1/

1/ The methodology and full results of this survey are given in Part B.

(1) The determination of priority fields and ministries for allocation of training opportunities has been the responsibility of the Central Planning Organization (CPO). The CPO's capability to make informed judgements about training priorities has been hampered by (a) lack of a plan indicating manpower requirements, (b) lack of adequate supply information such as how many are currently in training under various donor programs, in what fields, when they will return, etc., (c) lack of a professional staff or consultants for manpower planning. In the absence of objective plans indicating priority manpower needs in the public sector, distribution of AID training opportunities have, in practice, been allocated among the ministries in an ad hoc manner, based on criteria such as the number of employees in the ministries, special requests for training from ministries and general areas of emphasis in the forthcoming Five Year Plan.^{1/} A manpower report prepared in 1975 by James Socknat and Clive Sinclair has apparently been dismissed as a guide for planning education and training programs.^{2/} The Five-Year Plan, now in the draft stage, is supposed to include a plan from each ministry outlining their manpower needs; this may become useful for guiding and coordinating future training programs.

The training of manpower in priority fields and ministries is also affected by the situation within ministries such as (a) whether there is adequate communication and administrative procedures so that employees are promptly informed of training opportunities and nominations made to the CPO, (b) whether there are enough qualified employees available for

^{1/} The AID Mission formally recommended to the CPO that AID's Training opportunities be allocated to those ministries most associated with development, such as education, agriculture, economy, foreign affairs, interior, supply and CPO.

^{2/} YARG officials have not been convinced that the Socknat-Sinclair report is accurate.

training and whether they can be spared for training, and (c) whether there are conservative elements in positions of authority who might fear the potential challenges resulting from sending subordinates abroad for training. The response of the ministries to CPO's offers of training opportunities has varied greatly from one to the next. The response has been particularly poor from the Ministry of Agriculture and the Ministry of Education.

The AID Mission has been concerned about the biases produced by the above factors and has recently urged the CPO to emphasize certain ministries that have made few nominations in the past. In the case of the Ministry of Agriculture, AID decided to overcome the bottleneck by sending groups of secondary school graduates for undergraduate degrees in agriculture on the agreement that they would work for the Ministry of Agriculture after their education.

(2) Most of the nominations for AID training programs have been for mid and high level professionals with substantial amounts of responsibility in their ministries. Upon return from training, nearly all either returned to the same or a higher position.

The return rate for government employees has been good; of those that completed their training, 87 percent still work for the government and nearly all for the same ministry that sponsored their training. This good return rate may be due to (a) a training law that makes employment with Government mandatory for twice the length of training,

(b) the characteristics of the returned participants; most are in their early thirties with well established careers and families that act as incentives to return. The record of employees^{1/} who were sent for technical training to become counterparts to specific AID projects is much worse. Of 9 that had completed their training only 1 remains with AID. The explanation of this high loss is probably attributable to the fact that the type of skills they learned such as welding, mechanics, pipe fitting, etc. draw high wages in the oil-rich countries and thus offer high incentives to leave the Yemen.

(3) Of the returned AID participants who were interviewed, about 70 percent claimed to be currently utilizing their training either "very much" or "moderately." Of those with little or no current utilization of AID training, the most common reason was irrelevance of training to their job, though lack of equipment, funds or other resources, lack of supervisor support, and lack of trained staff were also cited as reasons.

(4) About one half of the participants interviewed said they have been able to transmit a substantial amount of what they learned from training to others. This was accomplished through informal discussions and on-the-job training of counterparts.

(5) Since most of the returned participants have only been back from training for a year or two and are still under mandatory service agreements with the government, utilization of training over the longer-term is difficult to assess. To get an indication for what might happen in the next year or two, those interviewed were asked

^{1/} AID employees per se have not been sent to training under O20. These employees referred to are actually YARG employees assigned as counterparts to work under AID projects.

about their career plans. Only 50 percent said they planned to remain in their current employment; 9 percent would seek more education; 7 percent would look for work in another government office and 7 percent would go into the private sector in the Yemen. None stated plans to seek employment abroad. In general, those interviewed expressed satisfaction with their current employment and field of specialization, though there were special areas of dissatisfaction such as inadequate salaries.

Project 020 also had an institution-building purpose; that of supporting the YARG effort to develop a career training program based on the coordination of all foreign training opportunities. Training programs have been centralized through the CPO and a training law was passed establishing guidelines for a system of selection, monitoring and placement of participants. However, much in the training law has not been implemented. The Scholarships Office in the CPO, which is responsible for coordination and implementation of all donor training programs, is very understaffed and suffers from rapid turnover in staff. There is no manpower planning unit in the CPO capable of doing the data collection, projections and analysis that should be the basis for rational guidance for training programs abroad and in the Yemen. AID has done little to support the YARG's efforts in this field, despite a clear need. This may have affected not only the success of AID's project 020 but of other donor training projects.

Incidentally, it has also limited the ability to evaluate or measure success of training programs, since little data or studies are available that consider (1) what the demand is for educated manpower, (2) what training programs are already in existence, and (3) follow-up such as reemployment and utilization of those returning from training.

Though not stated in the original project paper, the project 020 may also have had a political purpose of increasing US-YARG ties. The U.S. may have increased its influence within the YARG by introducing high level government officials in various ministries to the people and culture of the United States.

A final question in the evaluation of project 020 is whether its purposes were appropriate in light of AID's wider goals, such as the Congressional directive to benefit the poor and women. On a few occasions, AID training projects have been criticized because their direct beneficiaries, the participants, are a select few and frequently from an elite group. Arguments have been made that rather than concentrate on giving higher education to a few, AID should be involved in primary or non-formal education with low unit costs and widespread coverage of the population.

While not ruling out the desirability of AID's future involvement in other areas of Yemen's education sector, the Development Training Project 020 can be justified as a priority project. In the Yemen's current stage of development, the project 020 has been filling a very immediate need in the government to meet trained manpower shortages. Easing the educated manpower bottleneck in the public sector can indeed be seen as having been a prerequisite to the development of other projects. In 1973 the YAR was just beginning to emerge from a traditional society and to develop a modern government structure. The new ministries had very few educated staff capable of meeting the operational and administrative responsibilities of modernizing the Yemen society and economy. Before development projects could be reasonably designed and managed, there was an urgent need to meet the trained manpower shortages in the public sector. To the extent that the project 020 has increased the YARG's capability to promote development, it can claim as indirect beneficiaries all those in the Yemen society who will eventually benefit from their government's new capacity.

B. EVALUATION OF RETURNED PARTICIPANTS: SURVEY RESULTS

1. Objective and Methodology of the Survey

Part of the evaluation of project 020 is a determination of the outputs achieved in relation to the project's purpose and goal. One method utilized to measure these outputs was the "Former Participant Interview" designed to collect, from participants who have completed their training, information relevant to the following variables:

- (1) personal characteristics and qualifications such as age, sex, social and ethnic background, educational attainment and employment prior to selection;
- (2) selection and AID training experiences such as pertinent selection factors, language requirements, type, field, location and duration of AID training as well as opinions and attitudes towards training received;
- (3) post-training experiences such as re-employment, utilization of AID training and future career plans.

Although "former participants" represent only 40 percent (see table 2) of all participants involved in this project, they were selected as the group most capable of providing the relevant output information.

In order to collect this information, a three and one-half week study in the Yemen was undertaken. Working from a list provided by USAID/Yemen, 65 AID participants were identified as having completed their training programs.^{1/} There is some question as to the completeness of the list since two of these participants were identified during interviewing.

^{1/} One participant completed two training programs.

Neither the AID Mission nor the Central Planning Organization (responsible for training programs) have a workable follow-up system for trainees once they return to Yemen, which made locating the former participants time-consuming.^{1/} Despite these difficulties, 44 of the 65 (68 percent) potential respondents were actually interviewed (29 in Sana, 11 in Taiz and 4 in Hodeidah). The other 21 were not available due to illness, emigration, location in remote areas of Yemen or participation in new scholarship training opportunities abroad. One former participant had died.

In conjunction with the personal interview process, information concerning each potential interviewee was transcribed from the Mission files onto the interview schedule. Not only did this shorten the interview time and provide a check on difficult items such as dates, it also helped to provide some basic information for the 21 participants not available for direct interviewing.

On the whole, most respondents were very receptive to the interview and welcomed the initiative on the part of AID to solicit their opinions. For 70 percent of the respondents, interviews were conducted in English. The rest were translated either in whole or in part into Arabic by an aide provided by the Mission. Since most of the English interviews were done first, the aide was very familiar with the interview before he was required to help with translation. Despite this, he occasionally grew weary of the process and overlooked a complete translation of all the multiple choices for some questions.

Since the total number of interviews was relatively small, editing and coding of the schedules and tabulation and verification of the data were

^{1/} Although the AID Mission requires that returned participants should report to the AID training officer upon return to the Yemen, in practice they do not. Also, the Mission does not receive cables about participant's return dates or copies of exit questionnaires that OIT is supposed to administer to participants before their departure from U.S. Probably the most realistic method of follow-up is occasional surveys such as this one.

completed by hand.

2. Results of the Survey

As indicated in section A above, some of the important questions concerning project 020 include: Who was selected for training; Where did they come from; What training experiences did they receive under the project; How are they utilizing their training; Where are they now; and Where are they going? Answers to these questions from the data collected are set forth below.

(1) Personal Characteristics and Qualifications of the Participants-

In general, former participants of project 020 were married men with a mean age of 29 during training. Although most were born in Yemen (81 percent),^{1/} the participants spent an average of 12 years outside of the country. Much of this time abroad was spent receiving an education which, until a decade and a half ago, was scarcely available in Yemen.^{2/} They completed a median number of 13 years in school with 78 percent receiving a secondary school certificate and 41 percent a university degree.

In table 6, training beyond the primary/secondary level for all participants concentrated in business administration, management, accounting and economics (26 percent), public administration and law (17 percent) and mechanics (14 percent). Most technical training was in either aviation, surveying or mechanics; non-degree academic training was mostly in

^{1/} The basis of all percentages given in this portion of the text exclude participants for whom no information was available or who failed to respond as well as those for whom the question was not applicable.

^{2/} A modern education system designed along the Egyptian system was established in 1963. Although a select group of individuals did receive instruction other than religious in Yemen during the Immate, these were few in number.

Table 6. Participants by Field of Specialization and Type of Training Received Beyond Primary/Secondary Level, Prior to AID Training

Field of Specialization	Total		Technical		Non-Degree Academic		Under-Graduate		Graduate	
	N	X	N	X	N	X	N	X	N	X
Agricultural Sciences and engineering	2	4.8			1	11.1	1	4.8		
Aviation	2	4.8	2	18.2						
Business admin./management, accounting, economics	11	26.2			5	55.6	6	28.6		
Development, planning, computer science, statistics	3	7.1					2	9.5	1	100.0
Engineering, survey drafting	3	7.1	2	18.2			1	4.8		
English language, public relations, teaching/education	3	7.1			2	22.2	1	4.8		
Mechanics, maintenance and construction	6	14.3	6	54.5						
Public administration, law	7	16.7			1	11.1	6	28.6		
Social and political sciences	3	7.1					3	14.3		
Others	2	4.8	1	9.1			1	4.8		
Total^{1/}	42	100.0	11	100.0	9	100.0	21	100.0	1	100.0

^{1/} Excludes 23 participants for whom this information is either not available or not applicable.

Note: Field relates to highest degree earned or that which occupied the most time of study.
Percentages may not add to 100.0 due to rounding.

business; and degree training was in business and economics, law, development planning and statistics as well as the social and political sciences.

Although the former participants are among the educated elite of Yemen, other aspects about their background are quite interesting. Traditionally, Yemen has been an area of various social and ethnic differences. In general, these differences are somewhat geographically distributed. Since a Yemeni's personal identity is strongly identified with his father (as in other Arab societies), the geographical location of his father's village tends to reflect his particular social/ethnic background. Of the participants interviewed, 43 percent indicated that their father's village was located in the governorate of Taiz, 30 percent in the governorate of San'a and 9 percent in Al-Beidah. Other governorates represented included Hajjah, Dhamar, Hodeidah and Ibb (9 percent). Another 9 percent were actually from South Yemen. Thus, the origins and presumably the social and ethnic backgrounds of these participants were diversified. Also, 29 percent of the participants said that their fathers were farmers, another 24 percent were merchants or sales workers and 14 percent were production workers, craftsmen, equipment operators or laborers. Other occupational categories represented were professional, technical, administrative and managerial occupations, clerical workers, services and the military (29 percent). Traditional roles not easily categorized, such as Shaykh (chief of a tribe) and religious judge, represented another 5 percent.^{1/} Again, the

^{1/} Percentages may not add to 100 due to rounding.

Table 7. Participants by Category and Level of Occupation Prior to AID Training

Category of Occupation	Level of Occupation									
	Total		Top Level Management		Middle Level Management		Low Level Management		Staff	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Professional, technical and related workers	33	56.9 (100.0)	1	50.0 (3.0)	11	47.6 (33.3)	10	66.7 (30.3)	11	61.1 (33.3)
Administrative and managerial workers	8	13.8 (100.0)	1	50.0 (12.5)	7	30.4 (87.5)	-			
Clerical and related workers	3	5.2 (100.0)			1	4.3 (33.3)	2	13.3 (66.7)		
Sales workers	-									
Service workers	-									
Agricultural, animal husbandry, fishermen and related workers	1	1.7 (100.0)							1	5.6 (100.0)
Production and related workers, transport equipment operators and laborers	12	20.7 (100.0)			3	13.0 (25.0)	3	20.0 (25.0)	6	33.3 (50.0)
Military	1	1.7 (100.0)			1	4.3 (100.0)				
Total ^{1/}	58	100.0 (100.0)	2	100.0 (3.4)	23	100.0 (39.7)	15	100.0 (25.9)	18	100.0 (31.0)

^{1/} Excludes 7 participants for whom category of occupation and level of occupation are unknown.

Note: Percentages may not add to 100.0 due to rounding.

participants came from heterogeneous backgrounds.

Former project 020 participants were employed mostly by the YAR government or by joint YAR government/private sector organizations such as the Yemen Bank (see table 4).^{1/} Nearly 86 percent were employed in San'a, 11 percent in Taiz and 4 percent in Hodeidah and Hajjah. The average length of time employed in their respective positions prior to selection was between 3 and 4 years. Table 7 indicates their occupations and managerial responsibilities at that time. Occupationally, 57 percent of the participants were professionals or technical workers, 14 percent were administrators or managers, and 21 percent were production workers, transport equipment operators or laborers. The remainder were clerical, agricultural or military.^{2/} Professionals and technical workers were divided about evenly between middle level management, low level management and staff.^{3/} Administrators were mostly middle level management while production and related workers performed at the three lowest levels. Of all the participants represented in this table, only 3 percent were top level management, nearly 40 per-

^{1/} One non-government organization represented is the Mohamed Ali Othman School in Taiz, which is a private, non-profit organization.

^{2/} Categorization based on ILO, International Standard Classification of Occupations (ISCO-1968).

^{3/} Top level management includes Directors, Deputies and Assistant Directors of organizations and their branches (i.e., Taiz, Hodeidah); Middle level management includes Directors, Chiefs and Assistant Directors, Chiefs of Department within the organizations; Low level management includes Section Heads, Staff Supervisors and Foremen within departments of the organizations; and Staff, who have negligible managerial responsibility. Categorization was based on titles, job descriptions and supervisory responsibilities.

cent were middle level management, 26 percent low level management and 31 percent staff.^{1/}

In summary 85 percent of all participants were government employees, 71 percent were professionals, technical workers or administrators and 43 percent were top or middle level managers.

(2) Selection and AID Training Experiences - The previous section described the participants selected for AID training. A more difficult question to answer is how they were selected. Other sections of this paper amplify the selection process from various angles. The results of the survey provide only the participants' viewpoint (that which he was willing to reveal) concerning his selection. Of all interviewed participants, 75 percent said their selection for AID training was initiated by their supervisor. Only 5 percent indicated it was initiated by someone else. Twenty percent said their selection was actively sought by themselves.^{2/} Fifty-nine percent said no one else competed with them for selection. When asked what factors were important for their selection, they gave the following responses:

^{1/} In section (3), a comparison of this data will be made with the participants' current occupations and managerial levels.

^{2/} In a world-wide study of participant training programs (see Forrest E. Clements, World-Wide Evaluation of Participant Training, Washington, D.C.: USAID, 1966), most participants mentioned their supervisor as the principle agent of their selection for AID training.

	Very Important	Not Very Important	Don't Know
Personal Contacts	51%	40%	9%
Personal Ability	88%	7%	5%
Language Ability	93%	5%	2%
Professional & Educ. Qualifications	86%	12%	2%
Job Needs	86%	14%	-

Traditionally, Yemen is a country where, personal contact is an important factor in accomplishing many tasks. This is a delicate factor to measure, however, through direct questioning. Surprisingly, at least 51 percent did say that this was a very important factor in their selection. Most concurred that personal ability, professional and educational qualifications and job needs were very important factors in their selection. In addition, 93 percent indicated language ability was an important selection factor.^{1/} Of all the interviewed participants, 66 percent said that a knowledge of English was a prerequisite (or requirement) for their participation in their AID training program. For the most part, those attending their training in the U.S. needed to know English. Although those who attended their training in Beirut needed some English for technical terms, their instruction was basically in Arabic. Table 8 specifies the total number of hours of English language training received in relation to their AID training. Most of

^{1/} Section D.3 of this paper discusses the importance of language as a part of the selection process.

Table 8: Participants by Hours of English Language Training Received in Relation to their AID Training

Hours of English Language Training Received	U.S. Participants						Beirut Participants				
	In Yemen Prior to Training		In US Prior to Training		In US During Training		In Yemen Prior to Training		In Beirut During Training		
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent	
none	22	73.3	12	38.7	29	93.5	10	71.4	-	-	
less than 100	2	6.7	3	9.7	1	3.2	1	7.1	8	61.5	
100-299	} 100+	3	10.0	4	12.9	X	X	2	14.3	X	X
300-499		3	10.0	11	35.5	1	3.2	1	7.1	5	38.5
500-699		-	-	1	3.2	X	X	-	-	X	X
Subtotal	30	100.0	31	100.0	31	100.0	14	100.0	13	100.0	
not available, no answer	9	X	8	X	8	X	12	X	13	X	
Total	39	X	39	X	39	X	26	X	26	X	

X - not applicable

Note: Percentages may not add to 100.0 due to rounding.

Table 9: Interviewed Participants by Adequacy of English Language Training Received and Location of Training

Adequacy of English Language Training Received	Total		US Participants		Beirut Participants	
	Number	Percent	Number	Percent	Number	Percent
More than adequate for studies	2	6.5	2	10.5	-	-
Adequate for studies	9	29.0	8	42.1	1	8.3
Inadequate for studies	20	64.5	9	47.4	11	91.7
^{1/} Total	31	100.0	19	100.0	12	100.0

^{1/} Exclude 13 interviewed participants for whom this information is either not available or not applicable.

the training in Yemen was at the Yemen America Language Institute. In the U.S., English language training was received at the American Language Institute of Georgetown University. Those receiving training during their AID training program received it at their respective institutions. In Beirut, the participants received English at the Amilieh Technical Institute where they received their AID training. Interestingly, 73 percent of the U.S. participants received no English language training in Yemen before departure to the U.S. Once arrived, 48 percent went straight into their AID programs with little or no English language training. If the participant really needed intensive language training, he tended to spend 3 to 4 months (or 300 to 499 hours) in such training. Once enrolled in the AID program in the U.S., very few participants elected further English courses.

Since Arabic was the major language of instruction in Beirut, it is not surprising that 71 percent of these participants received no English language training in Yemen prior to their departure. However, all Beirut participants received some English instruction during their 9 or 12 months AID training as an aid to their training.

When asked if they felt the English language training they received was adequate for their studies, over 50 percent of the U.S. participants indicated that it was adequate or more than adequate. Only 8 percent of the Beirut participants concurred (see table 9). During the interview many Beirut participants indicated quite freely that they wanted to learn

more English for their personal enrichment. This attitude is obviously reflected in their response to the adequacy of the English language training they received.

When asked in what ways the English language training they received could be improved, the most frequent ways mentioned were lengthening the training period and emphasizing the training received in the U.S. Others indicated a need for more training in course related (technical) vocabulary. The rationale given for the U.S. emphasis was that the participants felt they learned English better if they were placed in an environment where they had to utilize their training daily. In Yemen, they said they would speak English in the class only and use Arabic in most other conversations. Also, they felt a need for more technical terms to help them in their course work.

Besides the information on selection and English language training, the survey provided data on the location, type, field and duration of training received by the participants. Table 3 in section A of this paper shows participants who have completed their project 020 training by field of specialization, type of training and location of training. As mentioned above, all but one of the participants who completed their training were in non-degree academic or technical programs, 61 percent in the U.S., in Universities, Federal Training Centers, and private businesses and 39 percent in Beirut, at the Amilieh Technical Institute.^{1/} One participant who was in a non-degree program had it changed to a degree after he commenced his training in the U.S. He received an Advanced

^{1/} The participants who went to Amilieh Technical Institute were originally funded under Project 017 and 022 and were to fill positions in a joint YARG/USAID project support facility. Project funds were needed for emergency commodity procurement; therefore participant funding was shifted to project 020. This was technical skills training required to set up the support operation.

Professional Degree in Civil Engineering. Most of the other participants received a certificate or university credits (which could be applied towards a degree if they returned later). A glance at the second portion of table 3 reveals that, currently, participants are more likely to be involved in degree programs than in the past. Also, the location of training is more equally divided between the U.S. and third countries. It should be noted, however, that the 19 participants currently in the U.S. pursuing undergraduate degrees are former AUE students who are now participating in the 020 project.^{1/}

Although the former participants were aware that their programs were non-degree in nature, many vocalized their discontent that they could not continue their training until they earned degrees, by writing letters to YAR government officials or the USAID directly, by cabling complaints, or by trying to persuade their State side counselors to make the changes.^{2/} Most participants averaged between 6 and 12 months in their training programs (77 percent).

Fields of specialization pursued by former U.S. participants varied: Banking and finance represented 28 percent; business administration, management, accounting and economics as well as development planning and statistics represented 38 percent. Other fields included were agricultural development, aviation, engineering, mechanics and public

^{1/} See AID, "Advice for Program Change", project 279-11-690-020, draft: NW/NENA: E.A. Glaeser, 12/2/76.

^{2/} This desire to return home with a degree was also noted by Clements in World-Wide Evaluation of Participant Training.

administration and law. Fields of specialization of Beirut participants included survey and drafting (38 percent) as well as mechanics and maintenance (62 percent). Over 67 percent of all participants indicated they helped plan the training they received either in Yemen prior to departure, or in their respective locations of training. Currently, agricultural sciences and public administration are the most frequent fields of specialization.

In an attempt to pinpoint some of the problems project 020 participants faced during their training periods, the interview focused on content and duration of and changes in the programs, language and other problems as well as help they received with these problems.

Most of the participants (54 percent) felt the courses they studied were about the right level of difficulty for them. However, 21 percent felt that they were too advanced and 26 percent thought they were too elementary. On the other hand, Clements' paper indicated only one-fifth of the participants from the world-wide study rated the programs either too simple or too advanced. During the interview, some of the Yemeni participants commented that more concern should be given to planning programs tailored to the needs of the individual participants.

Eighty-four percent of the participants said their AId training proceeded according to the pre-arranged time schedule. The others, 16 percent, either departed late for their training or terminated their programs early.

Participants felt that their training programs were either too short (51 percent) or the right length (42 percent). Most participants made no changes in their programs during training (42 percent). However, when changes were made they tended to be an extension of the program or a change in subjects or fields of study. Seventy-five percent who experienced program changes favored them.

While in training it is expected that participants abroad will experience some difficulties. One problem experienced by 37 percent of the participants was language negatively affecting their studies, either considerably or to some extent. The other 63 percent indicated it had little or no effect. These percentages were about the same no matter where they received their training.

Finances as well as housing and transportation were other problems experienced by some participants. Financial problems were either a difficult problem or something of a problem for 56 percent of the participants responding. All of these said the money they received was too little. Housing and transportation problems were a difficult problem or something of a problem for 49 percent of the participants. Many of these were at Amilieh Technical Institute where dormitory rules were considered inappropriate for mature men. Family problems were cited as a difficult problem or something of a problem for 26 percent of the participants. These problems sometimes caused participants to terminate their training programs early. Cultural and social adjustment was cited by 30 percent of the participants as a difficult problem or some-

thing of a problem. Participants often complained they did not have enough informal contact with Americans. Loneliness or homesickness was often experienced.

When participants had problems or needed advice they frequently received help from a faculty member of the institution they attended (45 percent). Twenty-one percent said their USAID counselor was the most helpful. Friends, classmates and other AID participants helped most for another 17 percent of the participants.

Despite whatever problems the participants experienced individually, in all, the data indicate that 91 percent completed the training originally agreed to by the participants and USAID. The other 9 percent completed some but not all of their training. Most of these returned slightly early due to family problems. Due to incomplete data on drop-outs from the program, it is not possible to calculate a drop-out rate for project 020. Of the former participants, one never commenced his training due to illness. Another three dropouts identified would be listed under current participants.

(3) Post-Training Experiences - As stated in the project paper, the outputs of project 020 were expected to be "... trained manpower in administrative and technical fields; development of a career training program as an integral part of the YAR's civil service career development program; and the centralized governmental machinery for selecting, monitoring, and placing trainees in accordance with YAR development priorities."^{1/} This survey provides data on the former participants'

^{1/} See AID, Project Authorization for Project 279-11-690-020: Yemen Arab Republic, February 1973, p. 6.

Table 10: Participants by Location and Employment Status.

<u>Location of Participant</u>	<u>Total</u>		<u>Employed</u>		<u>Unemployed</u>		<u>Don't Know</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
In Yemen	54	84.4	51	79.7	2	3.1	1	1.6
San'a	32	50.0	30	46.9	1	1.6	1	1.6
Taiz	11	17.2	10	15.6	1	1.6	-	-
Hodeidah	6	9.4	6	9.4	-	-	-	-
Salief	2	3.1	2	3.1	-	-	-	-
Rad'a	2	3.1	2	3.1	-	-	-	-
Yarim	1	1.6	1	1.6	-	-	-	-
Not in Yemen	10	15.6	2	3.1	0	0.0	8	12.5
Abroad (on scholarship)	4	6.2	2	3.1	-	-	2	3.1
Abroad	6	9.4	-	-	-	-	6	9.4
Total*	64 ^{1/}	100.0	53	82.8	2	3.1	9	14.1

* Excludes one dead participant.

^{1/} All percentages are based on this total figure.

"Location of participant" is defined as the participant's current place of economic or non-economic activity.

"Employed" is defined as holding a job and receiving pay.

Note: Percentages may not add to 100.0 due to rounding.

Table 11: Participants by Place of Employment Prior to AID Training and Current Place of Employment.

	Current Place of Employment							
	Total	Government		Non-Government		Unemployed	Deceased	Don't Know
		Same	Other	Private	USAID			
<u>Government</u>								
Finance Ministry	1	1						
Ministry of Health	1	1						
Ministry of Interior	2	1						1
Command Council	1	1						
Civil Aviation	1					1		
Confederation of Yemen								
Development Association (CYDA)	1							1
Ministry of Education	2	1				1		
Yemen Salt Mining Co.	1	1						
Central Bank	3	1	1				1	
Yemen Bank	7	7						
San'a Municipality	4	4						
Taiz Water Authority	3	3						
Yemen Airways	5	5						
Central Planning Organization (CPO)	7	7						
Highway Authority	8	6		1				1
Ministry of Public Works	8	8						
Subtotal	55	47	1	1		2	1	3
<u>Non-Government</u>								
USAID	9							
Mohamed Ali Othman School	1		1	1	1			6
Total	65	47	2	3	1	2	1	9

"Place of employment" is defined as the organization identified by the individual as his employer. Thus, an individual may be borrowed from his place of employment by another organization and still be considered employed by the lending organization.

current location and employment status, on their occupation and managerial responsibilities, on their utilization of AID training as well as their future career plans. Also, it provides some insight into mandatory YAR government regulations controlling the reemployment of completed trainees.

Since their return, participants have held either one position or later changed to a second. Only one changed a third time. Currently, most (80 percent) are working in Yemen. Another 3 percent are employed by Yemeni organizations, but are abroad on scholarships. Twelve percent are in other countries, and their employment status is unknown (see table 10).^{1/}

In table 11, former participants are cross tabulated by place of employment prior to their AID training and current place of employment. Although most of those who formerly worked for YAR government organizations are still there, the total percentage of participants employed in the public sector dropped from 85 percent prior to training, to 75 percent currently. Since some of this drop can be designated as normal attrition, government retention of AID participants appears to have been good.

Mandatory government service agreements with participants prior to their overseas training may have been a factor in this retention. Of the participants interviewed, 70 percent said there was a written or verbal agreement with the YARG for such service. Of these, 3 percent were for less than 1 year of service, 41 percent were for 1 to 2 years of service, 28 percent were for 3 or more years of service, and 28

^{1/} Those who have left the Yemen are mostly from the group trained in technical fields in Beirut.

Table 12: Interviewed Participants by Category and Level of Current Occupation (April 1977).

Category of Occupation	Level of Occupation ¹									
	Total		Top Level Management		Middle Level Management		Low Level Management		Staff	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Professional, technical and related workers	17	39.5 (100.0)	2	22.2 (11.8)	4	25.0 (23.5)	6	50.0 (35.3)	5	83.3 (29.4)
Administrative and managerial workers	15	34.9 (100.0)	7	77.8 (46.7)	8	50.0 (53.3)	.	.	.	.
Clerical and related workers	3	7.0 (100.0)	.	.	2	12.5 (66.7)	1	8.3 (33.3)	.	.
Sales workers	.	.	.	.	.	.	.	.	.	.
Service workers	.	.	.	.	.	.	.	.	.	.
Agricultural, animal husbandry, fishermen and related workers	.	.	.	.	.	.	.	.	.	.
Production and related workers transport equipment operators and laborers	7	16.3 (100.0)	.	.	1	6.2 (14.3)	5	41.7 (71.4)	1	16.7 (14.3)
Military	1	2.3 (100.0)	.	.	1	6.2 (100.0)	.	.	.	.
Total ^{1/}	43	100.0 (100.0)	9	100.0 (20.9)	16	100.0 (37.2)	12	100.0 (27.9)	.	100.0 (14.0)

^{1/} Excludes one unemployed respondent.

Note: Percentages may not add to 100.0 due to rounding.

percent were for an unspecified time of service. Although most participants indicated they were satisfied with the mandatory service required, some expressed doubts about the possibility of leaving the government. The one participant who did move from the public to private sector explained that his mandatory service was never completed due to disagreements and the desire of his superior that he leave his position.

Over half of the participants were promised the same job when they returned from their training. Twelve percent were promised a promotion and 29 percent were promised just a job, but without specification. Of these agreements, one-fifth were not fulfilled. The reasons given included delays or lack of promotions as well as replacement of the participant by another employee. Since there were only four females among all former participants, it is a significant fact that the two who are currently in Yemen were replaced during training and job agreements were not fulfilled by their employers. Of the two participants currently unemployed, one is a female and the other is mentally ill. However, this unemployed female participant expects to be employed by the government in the near future.

Table 12 indicates the current occupations and managerial responsibilities of all employed participants who were interviewed. Compared to table 7 above, participants in the professional, technical occupation category dropped from 57 to 40 percent, but those in the administrative, managerial category rose from 14 to 35 percent. In production,

Table 13: Interviewed Participants by Current Utilization of AID Training in Their Jobs and Location of Training.

Current Utilization of AID Training	Total		US Participants		Beirut Participants	
	Number	Percent	Number	Percent	Number	Percent
Very much or moderately	29	70.7	20	74.1	9	64.3
Little or not at all	12	29.3	7	25.9	5	35.7
Total ^{1/}	41	100.0	27	100.0	14	100.0

^{1/} Excludes 3 interviewed participants for whom this information is either not available or not applicable.

transport operation, etc., the percentage of participants also dropped from 21 to 16 percent.

As indicated by their shift in occupations, participants in top level management rose from 3 to 21 percent. Those in middle level management fell slightly from 40 to 37 percent, but those in low level management shifted from 26 to 28 percent. Participants with no managerial responsibilities prior to training dropped from 31 to 14 percent. In general, participants who received AID training tended to return to government service and move into more administrative and managerial occupations at a higher level of managerial responsibility.

As indicated by their shift in occupations, participants in top level management rose from 3 to 21 percent. Those with middle level management responsibilities prior to training dropped from 31 to 14 percent. In general, participants who received AID training tended to return to government service and move into more administrative and managerial occupations at a higher level of managerial responsibility.

Little evidence is available concerning the relationship between AID training and movement into more managerial type positions. Some participants commented that other colleagues who received training moved ahead of them during their absence. Others complained that the training did nothing for their careers. However, participants who were exposed to AID training were upwardly mobile.

Table 13 indicates that 74. percent of the U.S. participants and 64 percent of the Beirut participants are currently utilizing their AID training in their jobs either very much or moderately. The most frequent reasons given for little or no utilization were either irrelevancy of training to the job or lack of trained staff and education of co-workers.

Fifty-six percent of the U.S. participants compared to 43 percent of the Beirut participants said that they transmitted their AID training to others either alot or quite a bit 1/ On the other hand, only 7 percent of the Beirut participants and 15 percent of the U.S. participants

1/ This lower transmission of training by Beirut participants might be explained by the fact that they were lower level technical employees and not in supervisory positions.

Table 14: Interviewed Participants by Amount of AID Training Transmitted to Others and Location of Training

Amount of AID Training Transmitted to Others	Total		US Participants		Beirut Participants	
	Number	Percent	Number	Percent	Number	Percent
A lot, quite a bit	21	51.2	15	55.6	6	42.9
Some, a little	15	36.6	8	29.6	7	50.0
None	5	12.2	4	14.8	1	7.1
Total ^{1/}	41	100.0	27	100.0	14	100.0

^{1/} Excludes 3 interviewed participants for whom this information is either not available or not applicable.

Table 15: Interviewed Participants by Plans for the Next Year or So and Location of Training

Plans for the Next Year or So	Total		US Participants		Beirut Participants	
	Number	Percent	Number	Percent	Number	Percent
Remain in Current Employment Status, Not Seek Work	21	50.0	17	58.6	4	30.8
Seek Employment in a (another) Gov't. Office in Yemen	3	7.1	2	6.9	1	7.7
Seek Employment in a Private Business or Industry in Yemen	1	2.4	1	3.4	-	-
Start Own Business in Yemen	2	4.8	2	6.9	-	-
Seek Employment Abroad	-	-	-	-	-	-
Get More Education	12	28.6	5	17.2	7	3.8
Other	3	7.1	2	6.9	1	7.7
Total ^{1/}	42	100.0	29	100.0	13	100.0

^{1/} Excludes 2 interviewed participants for whom this information is either not available or not applicable.

Note: Percentages may not round to 100.0 due to rounding

indicated that they transmitted nothing (see table 14). The methods most frequently used for the transmission of their training to others were informal discussions and on-the-job training.

Over four-fifths of the participants responding to the interview were either satisfied or very satisfied with their current employment, including the type of work they were doing, amount of responsibility, wages and benefits, field of specialization, mandatory service (where applicable), relevance of the job to their training, and prospects for advancement and future training. Two areas, in which the participants most frequently expressed dissatisfaction were wages and benefits (49 percent) and relevancy of their current position to their AID training (32 percent). Of those responding that they were dissatisfied with the relevancy of their current position to their AID training, 61 percent said they would like to change their field of specialization. These respondents represent 8 of the 10 who indicated they would like to change their specialization. More than half seemed to be dissatisfied with their administrative responsibilities and preferred more technical or professional work.

At the conclusion of the interview, each participant was asked what his or her plans were for the next year or so (see table 15). Nearly three-fifths of the U.S. participants replied they would remain in their current employment status, while only one-third of the Beirut participants responded as such. There is a heavy emphasis on the part of the Beirut participants to get more education. This response appears to be more of ^a request for another scholarship than a definite plan on

the part of the participant. Of the ten former participants abroad, 4 are former U.S. participants on new scholarships, 4 are former Beirut participants, and 2 are U.S. participants who have migrated to other Arab countries, presumably to work.

3. Summary and Conclusions

This survey was designed to help answer some important evaluative questions concerning the outputs of project 020. Respondents to the interview were former participant trainees who theoretically had the opportunity to return, to reestablish themselves in a position and to begin the utilization of their training. Although some of the data obtained was of an objective type, the interview also included subjective data such as attitudes and opinions of the participants about their selection, training experiences, problems encountered, current utilization of training and future plans.

The results of this survey indicate that although the returned participants tend to be a well educated group, other background indicators such as location of fathers' village and father's occupation suggest a more heterogeneous background. Most of the participants were selected from within government organizations, from professional, technical or administrative positions with middle or low level managerial responsibilities. Most of the participants were selected by their supervisors and over half said personal contacts were a very important factor in their selection. Ninety-three percent indicated their language ability was a very important factor in their selection.

The majority of project 020 participants were sent to the U.S. for training in academic courses for administration, management, economics and statistics. Three-quarters of the U.S. participants received no English training in Yemen prior to departure and nearly half received little or no English training in the U.S. Most knew English well.

All those who went to Beirut attended Amilieh Technical Institute for nearly a year of technical training in mechanics, surveying and drafting. Although Arabic was their main language of instruction, most said the English language training they received was inadequate.^{1/} Some indicated they needed more technical terminology, Others just wanted to learn more English for personal advancement.

Most of the participants felt the courses they studied were about the right level of difficulty and that their AID training proceeded according to the pre-arranged time schedule with no changes in program. Those who experienced changes generally favored them. Problems the participants experienced were in the areas of finance, housing and transportation. About one-third indicated problems with their studies due to language difficulties. About one-quarter of them had family problems which in a few cases actually caused participants to terminate their training programs earlier than planned. Also, loneliness and homesickness affected about one-third of the participants.

The person most likely to help the participant with problems and advice was not the USAID counselor, but a faculty member of the institution attended. About one-fifth of the participants relied on friends, classmates or other AID participants.

^{1/} This is the view of the participants. Teaching English was merely an option, not the intent of the Beirut training program.

Nearly all of the participants interviewed completed their full training course. They were awarded certificates of achievement or academic credit for courses taken, except for one, who received an Advanced Professional Degree. Some of the participants worked hard, but unsuccessfully, to have their programs changed to degree programs. They felt training without receiving a degree was useless for career advancement. 1/

Despite this, participants in their current employment in Yemen tend to be more concentrated in top and middle level managerial and administrative occupations than previously. The government organizations sponsoring the participants during their selection for AID training retained most of their employees. Mandatory service requirements appear to have been a factor in this retention. There is some indication that non-participant colleagues of AID trainees may have had similar experiences.

Most of the participants interviewed said they were utilizing their AID training and transmitting it to others. Although on the whole, the majority of the participants were satisfied with their current employment and intended to remain there, about one-third were dissatisfied with the relevancy of their positions in relation to their AID training. This dissatisfaction may be related to a preference for professional and technical responsibilities rather than paper work.

Some of the participants, especially those trained in Beirut, used the interview as an opportunity to make strong pitches for future

1/ The AID Mission's position has been to stick to the program requested by the YARG rather than cater to an individual's desires.

training scholarships. Although few in number, the Beirut participants (technically trained) showed more of a tendency to migrate abroad, especially to oil-rich neighboring countries where their skills draw high salaries.

The trainees for project 020 were essentially educated or experienced personnel selected by their supervisors from various YAR government organizations for 6 to 12 months of specialized, non-degree AID training. The participants returned to their government jobs and currently tend to be occupying higher level administrative and managerial positions. They are utilizing their training and want to remain in their positions.

C. THE ROLE OF YALI IN THE AID PARTICIPANT TRAINING PROGRAM

Since its establishment in 1973, the Yemen American Language Institute (YALI) has provided English language training for Yemenis slated to go abroad under the O20 Participant Training project of AID. As the extension and enlargement of participant training activities are being contemplated under project O40, the question is raised as to whether AID should diminish, continue-as-is, or expand its use of YALI for pre-departure English language training in Yemen.

The purpose of this brief report is not to make a recommendation on this question, since a decision on this will be in any case influenced by issues pertaining to the overall direction and proportions of the program. It is, rather, intended to provide an assessment of the apparent costs and effectiveness of the YALI training as an aid to AID, as well as to raise some issues that should be considered in deciding on YALI's role in the next phase.

1. Origin and Development

When the USIS Post was being re-established in Yemen in July, 1973, the Yemen Foreign Minister reportedly requested to the U.S. Ambassador that this be set up principally as an English language teaching program. Under the title of YALI, the initial intent was to focus on three categories of students:

(1) Yemeni school teachers, recently graduated from secondary school, who were nominated by the Ministry of Education for AID scholarships to AUB for undergraduate study. The objective was to bring 20 students from a near beginning to an advanced intermediate level, enough to pass the AUB entrance examination.

(2) Civil servants nominated by YARG for AID non-degree participant training grants in the U.S. Here the objective was to bring 20-35 candidates from an elementary or lower intermediate to an advanced intermediate level, enough to obtain an "adequate" ALIGU test level.

(3) University graduates selected by the US Cultural Affairs Officer for Fulbrights in the US. It was expected to have only a few in this category, perhaps up to an annual maximum of 7-10, and the objective was to have them reach the required 550 level on the TOEFL.

YALI started out with 20-30 students taught by the CAO (Nugent) and 4 Peace Corps Volunteers, all teaching parttime. While the numbers of students increased to the vicinity of 50, until July 1975 the program basically depended upon parttime PCV's and teachers, paid by the Peace Corps and a secretary-teacher paid by AID (Ticia Adams). The Peace Corps, always a bit reluctant about this association with a wing of the US government, decided not to continue the PCV support following July 75.

In the Spring of that year the new USIS Public Affairs Officer for Yemen (Marjorie Ransom) met with the Yemen USAID Director for Yemen (Al Ruiz) in Washington and came to an agreement that AID would pay for a full-time Director-teacher and a second full-time teacher starting in the Fall. (The Director was Steve Boeshaar and the second teacher an ex-PCV, Phyllis Crowell). These two were responsible for the language teaching, were supervised by the USIS PAO at YALI, and were to make bi-weekly reports to AID. The PAO employed a third teacher (Tom Gochenour) who was paid by USIS funds on a Peace Corps salary level.

During 1975/6 YALI was almost closed. Due to political activities by the Syrian and Iraq cultural centers in Taiz, YARG had closed all cultural centers. The British Council and YALI programs were allowed to remain open to teach English, but were supposed to be loosely affiliated with the National Institute for Public Administration (NIPA). Between March and May there were a series of efforts to have these programs subsumed under the title, supervision and roof of NIPA. Presumably under pressure from other states whose cultural centers had been closed and who claimed these programs in fact were cultural centers (which in part they were), the Dean of NIPA made several attempts to have the YALI language classes moved to NIPA. According to Marjorie Ransom, AID announced that its Participant Training Program depended on English language training being done at YALI and did not want the classes transferred to NIPA. This, and other interventions built up

support in the YARG cabinet and led to a decision by President Hamdi in May that YALI could remain open.

Also during this spring there was apparently something of a crisis produced by the fact that students at YALI, who had understood that when they had reached the required level in English would be sent by AID to the US, reached their level and found that due to a lack of funds AID was not able to send some of them abroad at that point. This reportedly led to a drop in morale among students and a falling off in attendance. The next year this situation was corrected by a prior assurance by YARG that the candidate would in fact be sent abroad if and when the required level was attained.

In 1975/76, the first academic year of full-time, AID supported teachers, two 15 hour/week afternoon classes and two 10-hour/week morning classes (AUB students) were held throughout the year. Of 200 candidates originally tested, 89 were enrolled and 35 remained in class until the end of the year. In the intensive afternoon classes, 18 had achieved "call forward" levels by the end of the year. ^{1/} About half of these had fairly high levels to begin with (at least 50 in

^{1/} The term "call forward level" was given several different meanings in the course of field interviews. For non-degree candidates, it is supposedly AID policy that they attain an average ALIGU score of 50 before being allowed to leave YALI. At YALI, however, the Director of Courses said that "in principle" they should have a 60-65 score. The figures of 70 and 75 were given as the levels for "academic competence," presumably for degree study. (Despite this practice, Georgetown ALIGU does not have a policy of not admitting participants below a certain level. They can accommodate students with no prior English in special classes.)

in either usage or oral) and achieved 65-90 range scores in 3-9 months. The other half started with scores from up to 0-50 and took 10-11 months to get to the 55-85 range.

In the summer one class of 27 students wishing to continue English was held for 10 hrs/week, and many were ready to depart by the end of the summer. Another class of 20 beginning class students ended up with all students needing further training.

2. Current Situation

Physically YALI is located midway between the University and the Ministry of Education, and is within walking distance from each. It occupies the second floor above the USIS offices where there are 3 classrooms, a teachers' lounge and the office of the Director of Classes. On the first floor there is also a language/lab screening room used by the language teaching group.

The whole USIS and language teaching establishment publically goes under the name of YALI and is headed by the USIS Public Affairs Officer (Marjorie Ransom). To a large extent she is responsible for external relations pertaining to the language program, handling liaison with AID/YARG Ministries and other educational programs.

The language teaching staff is headed by a Director of Courses (Jonathan Seely who has a Masters in Applied Linguistics and who is funded by AID.) While he makes bi-weekly progress reports to AID, he is

functionally responsible to the PAO on a day to day basis. In addition to teaching an intermediate advanced class 3 hours a day, he spends 5 hours a day on administration and teacher supervision. In addition, there are three "part time" teachers who have TEFL experience, each one teaching a beginning or elementary class for up to three hours a day. Two of these (Peggy Gall and Cathy Uphouse) are paid by AID, and one (Barbara Opila) is paid by USIS at a Peace Corps rate.

At present there is a beginning class that meets for two hours in the morning, and three afternoon classes for the beginning, elementary and intermediate/advanced levels that meet from 3-6 PM. There are 12 students enrolled in the AM class, and from 18 to 21 in each of the PM classes. Of the total current enrollment of 72, about 60 are AID students of which 11 are candidates for undergraduate study at AUB.

Officially YALI only takes students nominated to AID via the CPO from the government ministries, agencies and the University. In this academic year of 1976-77 there have apparently been about 134 such nominations. Of these 10 were never initially enrolled, either due to their not appearing (5) or there being scheduling problems or no places available (5). So far about 12 AID candidates, after testing and/or classes have had sufficient levels to leave for the U.S. or AUB (one-half to each). As of April another 40 have been dropped from the roles due to consecutive absences over a period 3-4 weeks (22 being AID students).

Of the current remaining enrollment of 72, less than half are more or less regular attenders in classes. Due to a combination of low starting levels and problems of irregularity, it is estimated that for two-thirds of the present students it would take about 1-1/2 years for them to reach "call forward" levels of English competency. It is now being proposed that there be a special intensive summer program for dropped or weak students to give them a more effective spurt. This, however, would not in itself improve the number able to leave this year.

It appears that there may be up to 15 or more students able to reach call-forward levels by next August, bringing the output for the year to approximately 25-30 students.

Besides teaching per se, YALI performs several additional roles in regard to potential or actual trainees. It plays a role in promoting interest, nominations and attendance in English training. It has tested about 40 Yemenis this year, some of which (5-10) were able to establish their ability to leave directly without enrollment in classes. It provides a cultural orientation to the U.S. And informally it keeps follow-up records of several of the returnees after study in the U.S.

While the entry English abilities of candidates are markedly lower this year than last, several measures have been attempted to improve the previous problems of getting nominations, having students show up, and attendance. An AID official and the PAO made visits and appeals

to YARG officials to get released time for beginning level candidates to attend classes more intensively during the day or more regularly. Despite support from above (Iryani), the results were mixed. In regard to AUB candidates this was not a problem since they were young and not into important jobs as yet. The Ministry of Education approved released time for some women in the Education Project to attend the specially arranged AM class, but in fact most of the nominated women didn't show up or attend regularly. But more basically, since Ministries had to pay for the time away from the job during language study and also would lose immediate services, there proved to be a continuing tendency to say there were no candidates, or perhaps not to provide follow-through encouragement. Class times during official work hours remained a serious constraint over and above the question of the potential reservoir of suitable candidates.

YALI had felt that when, in the previous year, it was not clear to students that if they worked and attained their level they would in fact go abroad, there was a morale problem with resulting poor attendance or drop-outs. The element of doubt, they felt, was due to Ministries not sending some candidates when they reached level, AID not having funds to send immediately all candidates reaching level in 75/6, and the occasional practice of AID pulling out and sending candidates who had not reached level in Yemen. Apparently these problems have been sorted out this year since such irregularities have not occurred. The effects, however, are more apparent in a reduced number of initial "no-shows" than in improved attendance records.

In regard to absences, AID has adopted a policy of dropping students who miss classes consecutively for 3-4 weeks, and insisting that they be readmitted only upon a new recommendation from their Ministry. While 40 students were dropped under this provision, it is not clear if this has had any effect on reducing frequent absences as opposed to continuous absences.

3. Assessment of Role

An assessment of the role of YALI is directly influenced by which of two different sets of criteria are used as a reference point. On one hand one could stress the objectives of taking candidates with an educational tradition, beginning English, and raising them to the academic English level that would enable them to undertake, with supplementary work abroad, degree programs on the undergraduate or graduate levels. Priority would be given to those with a prospect of being opinion leaders on their return, and along with language preparation it is hoped to give an orientation to U.S. culture and values. This is the traditional emphasis of a USIS type program, and for pedagogical reasons tends to be favored by the YALI staff. On the other hand one could emphasize the objectives of taking on-the-line development and project-related personnel, typically with limited or no English, and raising them to the level that with some supplementary work abroad would allow them to pursue non-degree training of shorter duration that would produce skills and outlooks useful to development work in Yemen. This is the central element in the traditional AID participant training orientation. 1/

1/ These two sets of criteria are mentioned in AID Handbook 10 as the difference between State Department and AID participant programs. The AID criteria is more likely to satisfy the Congressional mandate than State's criteria.

At present, YALI is more effective in regard to the former target group and criteria, and has significantly more difficulty being effective with the latter. Reasons and problems related to this will be discussed later, along with their implications.1/

In general YALI does a number of things well. In the past two years, since AID has supported the equivalent of two full-time people, the degree of professionalism in teaching has been markedly improved. The atmosphere in the classes is friendly but vigorous, and there is active student participation. This type of classroom atmosphere and experience is close to unique in Yemen. YALI provides testing services that are suitable for intermediate-to-advanced level candidates and are needed for candidates going abroad whether or not they take classes. The course-and-testing regime plays an important role in quality control or screening of candidates going abroad, helping to reduce additional language training time abroad and/or frustration among those who go. The "quality" being controlled, however, is more of a linguistic and academic nature, with an inherent bias against other measures of quality. In addition, YALI does well in the overall promotion of English studies and U.S. cultural understanding.

There are other areas in which YALI faces problems and has more limited effectiveness. The teaching and classroom situation, for instance, is not well adapted for students with little or no starting English. Such students face classes with more able students and a faster pace. YALI accepts such students, but explicitly expects that

1/ One reason is that YALI works in this direction and is set up to teach students with more education and with a working knowledge of English.

they will "self-select" themselves out through discouragement rather than undertaking the opportunity cost of catering for their specific needs. The level of many is too low to be measured by the ALIGU test, and no alternative measures for progress or feedback have been developed for this level. The Lado textbook-series being used is problematic, but there are plans to change this. Organizationally, YALI has so far been resistant to changing its class time schedule to be more adaptable to times when Yemeni employees are culturally and occupationally more able to attend, such as running classes past 6 PM. On grounds that this would provide a morale problem for U.S. teachers with families, it has instead focused on the negotiated released time route which has had very limited success. Problems that pose barriers to pedagogical effectiveness include: heterogeneous class groupings necessitated by more or less open admission policy, limited space and limited staff time; the flux of students starting and leaving at different times rather than all following a given course from beginning to end; and very irregular attendance by half of the enrolled students.

The costs of the English teaching program at YALI are here considered to be a combination of AID allocations for teacher and support costs of the one hand and the USIS estimate of the share of its recurrent expenses attributable to the English teaching program of YALI on the other. Time did not allow a critical assessment of the costs as reported to me by the responsible officers on each side, so they are taken here at their face value. For FY 77 the AID figure was given as \$57,520 by the AID project

officer, 1/ and the USIS costs were listed as \$50,400 by the PAO 2/ Accordingly, some \$108,000 was spent on the English teaching program during 1976/7.

Assuming this figure is correct, an accurate estimate of costs per student is still complicated by the flux of students and overlapping categories of statistics during this period. Considering only AID students and the period since August 1976, it would appear that a total of 100 were enrolled at some time at YALI. About 12 of these are listed as having been sent to US or AUB during the year, and some were actually only tested and sent rather than taught. As of April 1977, there were 60 AID students who had not dropped out, though many were erratic attenders

1/ AID Expenditures on YALI English Teaching, FY 77

Director of Courses/Teacher	\$29,000
2nd English Teacher	13,520
Support Costs	5,000
	<u>\$57,520</u>

2/ USIS Expenditures Estimated for YALI, FY 77

20% Salaries of PAO (\$9150) and five support staff	\$16,600
20% PAO Rent & Utilities	13,500
75% Rent/Utilities of USIS building	4,300
70% FAAS (administrative support)	10,700
3rd English Teacher (\$300/mo for 9 mos.)	2,700
Books and Magazines	2,500
	<u>\$50,200</u>

In addition to the 12 AID students already sent abroad it is estimated that from 8-18 more may have reached call forward levels by next August. Consequently the successful output for the year August 76 to August 77 may range from 20 to 30.

What is it costing to bring AID trainees to call forward levels through YALI this year? This may be looked at in terms of the cost per student to AID, but this would mask the additional costs to USIS that can be attributable to teaching AID students. Since over the year about 80% of the YALI students are AID candidates for US or AUB, this percentage of the USIS cost estimates should be added to the total cost per student. Consequently, \$40,000 of the USIS overall cost estimate might be attributable to AID students, bringing the total spent on such students to \$98,000. A rough indication of the cost per continuing enrollee and per successful candidate may be indicated as follows:

Table 16. YALI Costs Per AID Student

	<u>Cost to AID per AID Student</u>	<u>Cost to USIS per AID Student</u>	<u>Total Cost Per AID Student</u>
Continuously enrolled student (60)	\$955	670	1,625
Successful output			
- if 30	1,917	1,349	3,266
- if 20	2,876	2,024	4,900

In making a rough cost-effectiveness estimate of AID's use of YALI based on such figures an argument could be made for only considering AID's input and the successful output rate of AID students.

Assuming that AID is interested in English language training as a means of allowing candidates to make use of training opportunities abroad and not as an end in itself, a return on its language investment only occurs in the case of candidates who actually qualify to go abroad. (Only if it were established that actual or modified AID objectives could somehow be served by Yemenis with a better knowledge of English and the US who do not actually qualify to go abroad would it be justified to consider the whole continuing enrollment as a return on the investment). AID profits by the situation in which USIS also has an interest in devoting resources to language instruction since such activities officially justify its existence in YARG eyes and since some AID degree candidates serve USIS target group objectives. While it would cost AID considerably more to get comparable results from other sources in Yemen in the short run, this situation can be considered a windfall from the AID perspective.

A cost-effectiveness estimate should also consider the distinction between AID supported degree and non-degree candidates. Apparently almost a third of the 60 continuously enrolled AID students are candidates preparing for undergraduate study at AUB or for Masters programs in the U.S.^{1/}The YALI staff states that such candidates are more motivated and able to make more rapid progress than the typical non-degree candidate. Consequently the cost-effectiveness on investments on English language training for this group is higher than that for the non-degree candidate.

1/ i.e., not project 020.

The case of the traditional non-degree candidate in the Participant Training program poses a particular problem. It has been the stated AID policy that a candidate should reach the ALIGU level of 50 before leaving for further language work and the training program itself in the US. Last year AID estimated that the typical pattern for successful candidates was to spend 8 months in part-time language training at YALI, 3 additional months at Georgetown full-time language work, and then 9 months in a non-degree training program. Considering that AID pays \$940 per month 1/ at Georgetown for language training per candidate, the total amount of direct expenditures by AID for each successful candidate on language preparation before training was apparently, according to this pattern, roughly in the area of \$5-6,000.

Last year several exceptions were made in sending some non-degree candidates directly to Georgetown for language work without previously having reached level at YALI. It is reported that such candidates after almost a year at Georgetown still had not reached level. This represents a language teaching cost to AID of about \$11,000. Thus this route appears to cost AID at least \$5,000 more per candidate and probably considerably more.

Even if such exceptions are avoided in the future, there is a prospect of an increasing problem in regard to non-degree candidates. This is posed by the fact that the starting English level of non-degree candidates is declining compared to previous years. This year YALI

1/ Monthly costs per participant include \$600 for per diem and \$340 for training costs at ALIGU. Per diem is paid by the Mission and training costs are paid under a contract from inter-regional funds.

staff estimates that for 2/3s of the current enrollment it will take one to one-and-a-half years before they could reach level at the present rate of progress. (This is without special intensive summer courses, etc. It is not clear whether "level" refers to 50 or a higher average). If this is true and if such students continue and succeed, it will mean that they will have spent over 20 months in language preparation at YALI and Georgetown in preparation for 9 months in a US training program. This worsening language-to-training ratio in terms of time will represent a significantly higher language preparation cost to AID per successful non-degree trainee.

4. Discussion of Problems

Probably the most basic problem in the AID use of YALI for English language preparation for Participant Trainees is the tension between the role of taking and teaching degree candidates and that of catering to non-degree candidates. A number of factors pull in the direction of the former. For instance, it is easiest to teach and see progress with more able and motivated degree candidates, such as the AUB candidates who are the pick of the secondary graduates and have more time, and University people who have some academic tradition and are attracted to the advantages of a Masters' program abroad. Understandably the YALI staff prefers to concentrate on this group. The time demands and cost implications of getting this group to level are less, as generally are problems of discouragement and attendance.

On the other hand, as long as AID holds to the objective of providing short term non-degree training in the U.S. in situations that require a substantial level of English capability, it will need YALI to cater more to the needs of this group. This implies more attention and time on the part of YALI, and as seen above, ultimately a greater expenditure per such student on the part of AID. The difficulties in attracting, holding and successfully bringing such students to a level in a reasonable time period have understandably lead AID personnel to feel this is a bottleneck for this aspect of its training program.

Part of this bottleneck problem is clearly related to the low starting level of many of the candidates. How "treatable" is this situation? In an early justification of local TEFL training for the AID/PIOP program (Spring, 1974) it was indicated that for Yemeni candidates whose starting level of English competency was in the 30-40 range on the ALIGU battery it would be reasonable to expect that with 350-500 class hours of instruction about half could be brought to a level that would allow them to qualify for the ALIGU program at Georgetown and consequently for PIOP programs. But for those candidates who started with no usable English or whose starting level was on the ALIGU battery was "statistically irrelevant," there is little that can realistically be done to assist them. As has been suggested above, current and anticipated problems stem from the fact that many of the non-degree students at YALI belong to the latter category. It might be argued that certain steps could be taken to attract more students

with a starting level of usable English. But it is more likely that the problem is a reflection of the fact that the limited supply of such candidates has been, or is about to be, used up. The current supply of candidates with starting English are likely to be either those who learned English in Aden and elsewhere abroad or those who are interested only in degree programs. If this is true, there is apparently little that AID or YALI can do to significantly alter these supply constraints.

How tractable is the attendance aspect of this bottleneck? In noting the highly irregular attendance of some students in the past, a language consultant (Carroll) concluded that unless this could be improved there was no use in attempting to teach such students. It is probable that if YALI scheduling were more adaptable to matching the times when employed candidates are more free to come that there could be some improvement. A continuation of the YALI/AID effort to get more released time by YARG for candidates, which was an attempt to deal with this problem, might have some results. So might the suggestion from the head of CPO that Ministries could stipulate that if candidates did not attend at least a minimum number of times per month they would lose their scholarship. However, it is questionable that there will be in any case a significant change in Ministry willingness to provide released time with pay for candidates. And as it takes an increasingly long time for less able non-degree candidates to reach level, the discouragement factor could be expected to present continuing attendance problems.

To what is it reasonable to expect that YALI can effective winning students, given the supply, attendance motivational constraints discussed above? Theoretically this require such as special classes, more staff time and at materials as adapted to this level, etc. The earlier consultant, roll, noted that 20 classroom hours per week maximum for ve teaching. Since the current teaching load 15 hours per even with revised contracts and salaries for three teachers a potential for additional time only 15 total per week could be within this norm. Space is also a limit for having specialized beginning classes, though a regular assured a high attendance rate in given classes, additional and possibly of space outside YALI, would allow for more adaptability present space limitations. While such change be necessary movement with this lower level group, it is less quite possible that they would not be sufficient conditions significant limit in view of the motivational problem for who have to spend extended time on English for a training program does not promise reward of a degree.

5. Options alternatives

In principle are three broad options for AID policy regard to the YALI if one assumes some degree of continued

(1) dependence on YALI. If this option were considered is not intended to reduce the overall participation of training program in its present form, it would

necessary to examine alternative means of English preparation. One of these might be to give attention to developing the English teaching capacity of other programs in Yemen. At present other English teaching programs include the University, the National Institute of Public Administration, the British Council and a new private language school called Polyglot. Each has its own limitations for such purposes. The latter two are not in the public sector, where AID usually aims to develop institutional capacity. The former two both have organizational and personnel limitations, and it would take considerable funds and time before either could conceivably be an effective alternative. Another theoretical possibility would be to depend more on US-based English preparation. But there are indications that for below-level, non-degree candidates this option is expensive and possibly also frustrating for the student.

(2) Increase dependence on YALI. This option might involve increasing YALI's role in taking and teaching low level non-degree candidates. The significant problems facing this alternative have been discussed above. On the other hand it could comprise a greater role in taking and teaching degree candidates. This could only be done at either the disadvantage of beginning non-degree candidates or a major and costly expansion of the scale of the YALI program. In any case, this would represent a significant change in the traditional policy and rationale of the Participant Training program.

(3) Maintain the present dependence on YALI. Since the current situation is problematic for non-degree candidates, this option would require at least several remedial measures. Some of these are organizational in nature, such as more flexible scheduling on the part of YALI and more YARG measures to provide requirements or incentives for regular, continuing attendance. Others are more pedagogical, and oriented to catering to the particular needs of beginning students. But as discussed above, there is no assurance that even then there would be a significant change in the bottleneck that reaching the English level presents for the non-degree component of the program.

Such an analysis of issues and options, based as it is on only a few days of interviews and investigations in the field, may be hindered by inaccuracies or omissions. But if it is essentially correct it would appear that, in the context of the present orientation of the Participant Training program, none of the language options are all that promising. They either involve a break and/or indefinite delay before other local alternatives could be developed, a significant re-direction of the objectives of the program, or the prospect of at best only marginal improvements, with the likelihood of a continuing drag on non-degree candidates. (This report has not considered the

pros and cons of a YALI role in an expanded undergraduate or graduate degree program, let alone the difficult issues that need to be examined in such an overall policy option. Nor has it considered the issue of alternatives to the Georgetown program for US-based language training, such as the Experiment program at Brattleboro, Vt., with its home-stay component).

Indeed, this analysis would suggest that the major problems that constrain the effectiveness of YALI with non-degree candidates are more endemic to this particular situation than due to a lack of individual effort in any quarter.

It is very possible that the only satisfactory way out of the particular bind of this situation is to step outside the present outline of the non-degree training program and give more concerted attention to some basic alternatives that might meet similar objectives. For instance, are there particular training opportunities in the US that are needed for Yemenis but involve more of a hands-on type of training and do not require as high a level of English competency? Or are there some hitherto neglected training situations for a few selected skills in Arab States that, although perhaps not ideal, are at least better than what is available in Yemen and do not require language preparation time and expense? What are one or two potential training opportunities in Yemen that, with assistance, might be able to provide better domestic training related to development a few years hence?

D. THE YEMEN GOVERNMENT'S SYSTEM OF HANDLING PARTICIPANT TRAINING: SELECTION, MONITORING & PLACEMENT

1. System in Theory

On paper, the YARG system of handling participant training is outlined in two "legal" documents. The overall system is presented in the "Law on Missions and Scholarships for Study and Training" (Sept. 22, 1975); and terms for processing are included in the "Regulations and Organization of the Central Planning Organization" (August, 1975), Article 5 on the Scholarship Division. These two documents, prepared by experts at the CPO, lack internal consistency or coordination as well as a realistic adjustment to actual conditions. Their main features, however, will be summarized here as a theoretical reference point.

The Law deals with students going abroad on degree or non-degree training programs, YARG and or donor financing. The institutions to govern the process are two committees. The Higher Committee (chaired by the Minister of State for Development and including the Minister of Education, Chairman of the Civil Service Commission, President of Sana University, Dean of NIPA and Chairman of the CPO) was to meet twice a year. Its functions rather incongruously range from drawing up overall plans for the development of human resources to the approval and allocation of grants. The Preparatory Committee (chaired by the Chairman of the CPO, and composed of deputy level officials

from Foreign Affairs, Civil Service Commission, Education, and University) was to meet once every two months. It was to recommend overall policy, supervise implementation, develop training programs and also approve grants.

According to the Law, the annual training program is developed according to a series of steps. Each government agency sends a detailed description of its prospective training needs to the Preparatory Committee, which develops the program and sends it to the Higher Committee for approval. The agencies or ministries announce openings, collect applications and send them to the Committees for approval action and referral to the Civil Service Commission and others for implementation. The Civil Service Commission is to keep records and receive annual reports from participants. Additional articles indicate that the Ministry of Education's Department of Scholarships also announces opportunities, selects, and processes students, with an annual progress report sent to the Preparatory Committee. It is not indicated how this meshes with the other terms, though presumably it refers to undergraduate degree candidates.

The criteria for nomination and selection include citizenship, good character, requisite educational background, agency approval, medical checkup, a two year interval since last training, a guarantee to serve the government for a time equivalent to the training, and a commercial guarantor that training expenses will be repaid in case of default.

While the student is abroad the agency will pay his basic salary "in addition to expenses of training" (sic) Students abroad for four years have the right of one return to Yemen at government expense. They have to receive permission to marry or to change their field of study.

In regard to the student's return, he must come back within a month following termination of training or be subject to punishment decided upon by the Preparatory Committee; if more than six months elapse, he will be considered in default and it is required that he or his guarantor repay expenses. ^{he is} If/a degree holder returning to his agency, he is assured that his salary will not be less than when he left. With Ministry of Education or Civil Service Commission approval he may move to another job in the public sector. Elsewhere it is indicated that "if in the public interest" he may move to another public or non-public sector and have the work there count for fulfilling the 1:1 training-work time obligation.

The regulations of the CPO, issued a month before the Law, suggest another track or process. Here the Scholarship Section of the CPO's Department of Loans and Technical Assistance is to perform a number of the functions mentioned in the Law as being handled elsewhere. This section is responsible for moving correspondence and keeping records of scholarship or grant negotiations; for monitoring what is implemented or not, and why; writing reports on malpractice; evaluating the degree of utilization of returnees; and assisting with the preparation of regulations on the best ways to announce opportunities and make selections.

2. System in Context

Before moving to current practice, it is well to note several characteristics of the administrative context which are instrumental in assuring a gap between theory and practice. Relatively speaking, the CPO is probably the best organized of the YARG agencies. Established in 1971/2, it has five Departments and about 120 on its staff; these include 50 of the 690 university graduates in the YARG, plus about 70 secondary school graduates. Due to its comparative strength and its being closer to a planning mentality and the cross-sectoral coordinator of projects, there is a natural tendency for it to play a dominant role in areas allocated to other bodies under the Law. This tendency is reinforced by other conditions. For instance, planning data on which the determination of human resource requirements and priorities might be based (see the supposed function of the Higher Committee) is still in a rough or incomplete state. Consequently, somewhat impressionistic judgments about needs and priorities are most likely to be made at the CPO itself. The quality of personnel and administrative development in most Ministries is typically so problematic that they have extreme difficulty in planning ahead and determining training needs, let alone handling the type of processing foreseen in the Law. In addition, many of the grant or scholarship opportunities arise irregularly throughout the year and require relatively prompt action if they are to be utilized; in such cases it is hardly feasible to wait for biannual meetings for approval and implementation.

For such reasons, most of the important provisions of the Law have not been implemented and the two committees have yet to meet. So in practice the CPO is currently the body responsible for general coordination, and is specifically responsible for processing short non-degree training in general, training for specific projects, and post-graduate degree training. The Ministry of Education is responsible for under-graduate scholarship selection and processing, although the nominations are channeled through the CPO. As a coordinating and processing body, the CPO in any case only handles trainees through departure. At present it is apparently up to the Ministries to deal with the placement of returnees, and to enforce requirements of service or initiate any process of punishment for default.

default.

Even within the CPO there are conditions that constrain the implementation of its own regulations for dealing with grant or scholarship holders. Aside from the acting Chairman of the CPO (Mohamed Al-Ariki), there are only three staff people who deal with such issues. ^{1/} Of these, the head of the Department of Loans and Technical Assistance (Saad Mahrous) supervises the Scholarship Section but has numerous other responsibilities as well. Of the two people in the Scholarship Section, one handles the U.S., the USSR

^{1/} Since the March TDY, a new chairman has been appointed to the CPO, Mohammed Salim Basinwah.

and European sectors, and another deals with UN and Arab State scholarships or grants.^{1/} Time demands are such that they can do little more than handle correspondence and liaison; they consequently have not been able to touch such prescribed functions as monitoring, evaluation and follow-up.

The following account of current practice focuses on what seems to be happening from the CPO side within this context. It is based largely on CPO accounts and records.

3. System in Practice

(1) Offers and Announcements. - Opportunities or requests for training abroad may come to the CPO as a request from a Ministry or may be initiated by an offer from a donor. In the latter case, there seem to be three types: (a) project-related training with clear specialty areas, stemming from the fact that almost all of the over 200 outside-supported projects in the country have a training component; (b) donor offers with specialities indicated; and (c) donor offers with no specialities indicated.

Last year undergraduate degree candidates were supposedly only sent in the fields of agriculture, medicine and engineering. These priorities were apparently derived by the CPO from the needs of the development plans and indications of what the University could not be able to provide in training. The CPO claims that its initiative on this was necessary due to default by the Ministries. In 1976, for

^{1/} Since the first draft of this report, one of the Scholarships Section staff has left her position and the other intends to shortly. Both have received training scholarships abroad.

instance, a letter was sent to the Ministries asking them to project their training needs, in fields and numbers, for the next five years, but they were not able to think that way or project their needs. Consequently the CPO had to make its own assessment and priority listing.

Aside from this, if training offers were project or specialty specific, the announcements are sent by the CPO only to "the appropriate places." Whether the announcements are made to a specific sector or more broadly, the general practice is for the CPO to notify Ministries as the offers come, indicating the source of funding.

An offer for training with no specialties stipulated by the donor presents a special case, for which a procedure has had to be improvised. For instance, AID offers of grants for training have generally been open regarding fields. The British Council has also made open-specialty offers. In the case of AID, the training officer (Dominic D'Antonio) and two CPO staff members (Mahrous and Hussein) met and decided the offer should be sent to a broad range of Ministries and agencies. Thereupon the two staff members and the CPO chairman met, allocated numbers for the different bodies and included the allocations in the announcement letters to the Ministers or Deputy Ministers to whom the letter was sent. These allocations were reportedly based on a rough CPO estimate of the needs or shortages and other options of the bodies.

An example of a more deductive approach is offered by the case of undergraduate study in agriculture. The Agriculture and CPO Plan provision stipulated that from 1975 about 80 secondary graduates who had completed their one year teaching obligation would be sent each year to study agriculture in an Arab state. AID helped find places and offered to support about 25 per year; the Netherlands and others made further offers; and the announcement was placed in the newspaper.

(2) Nominations and Selection.

Once an opportunity or offer has been announced, by whatever channel, the general procedure is that the Ministry sends a letter to the CPO nominating the candidate for a particular field with the candidate's resume enclosed. Nomination evidently amounts to selection, assuming that papers and requisite qualifications are 'n order, since the CPO at this stage serves as a channeling rather than selecting body. In the case of AID candidates, the CPO staff member sends the papers to AID with a copy to YALI; the candidate is supposed to report to each place, and in the case of YALI either pass an English competency exam or reach the required level in courses before being eligible to leave.

One difficulty experienced with AID candidates has been the Ministry response to announcements in making nominations. Generally there has been a good response from the banks, Municipalities and Highway Authority; Agriculture and Education have been the worst. Another difficulty has to do with the candidates actually following through in reporting to the AID offices outside Sana or YALI, or either.

One particular limitation on nominations has recently been established in the case of candidates for undergraduate study. Henceforth only those with more than a 75% ranking on secondary school graduation are to be allowed to go abroad. Those with between 60-75% are to go to the University of Sana, and those with less than 60 may, after completing two years of teacher training internships in rural areas, apply for entry into the College of Education at the University. The President of the University and Minister of Education (Iryani) estimates that this will mean that this year about 500 will be eligible to go abroad under these terms.

(3) Monitoring.

The CPO only keeps track of where students go and for what areas of study. While AID candidates are still in Yemen studying English at YALI, and if YALI notifies it that the student is not attending classes, the CPO will write that the student will be dropped if he does not attend. If students abroad want to change their fields, the CPO handles communications for Ministry decisions on this issue. Otherwise there is apparently no systematic, as opposed to occasional

responsive, monitoring. Upon their return a trainee is supposed to make a report to the CPO on his training course and send a copy to AID, but few actually do this.

(4) Terms and Return.

The provision in the Law that the Ministry will pay the trainee's basic salary while in training is honored: reportedly this amounts to YR 350 for secondary graduates and YR 500 for BA holders or its "equivalent." A return trip to Yemen every two years is also covered. Also the requirement for having commercial sponsors, with collateral to repay expenses if there is no return, is supposedly in effect for undergraduate and graduate degree candidates.

Since there has been a problem with some degree students not returning immediately, notably those trained in Eastern Europe or the Arab states who are attracted to lucrative opportunities in the Gulf, it has recently been decided to adopt an additional measure. An effort is to be made to have the diploma delivered not to the trainee but to the Yemen Embassy in such countries, which will then send it to the Ministry in Yemen for holding until the student returns. This assumes that this can be implemented, and not having a diploma will deter the student from obtaining attractive employment elsewhere. This is not being applied in the US, reportedly on the grounds that there are not enough involved and there has not been much of a problem there in the past. It is also claimed that this is not a problem with non-degree trainees, since they are older, more rooted in Yemeni life and jobs, and perhaps without a degree have fewer options.

The Chairman of the CPO points out that it is not within the CPO guidelines to concern itself with the question of whether or not one returns, and if the provisions are enforced. Policy matters on this issue, and decisions on whether to apply punishments, are up to the Ministries or are a question of "higher policy." AID participants also sign a return agreement with AID as part of the standard condition of training form. This binds the participants to a commitment equal to twice the length of the training program, but not less than one year for non degree and Masters degree programs and five years for undergraduates.

(5) Placement.

The CPO staff has no direct basis for knowing what in fact happens in regard to placement of returnees. In principle, the old workers return to their old Ministry; and for new graduates with no previous post the Commission for Receiving Graduates (which includes the Deputy Minister of Education) decides where they will work. The trainees who have been abroad for less than a year and return without a certificate are to have the same salary, and will presumably not have a better post. Those abroad for less than a year but returning with a certificate are to have a YR 20 increment. Those abroad for more than a year will have their annual promotion like others, plus

plus bonuses. And if one obtains a Masters, there is to be a YR 40 increase in the basic salary. Thus, participants must return with some type of certificate or degree to benefit financially from training.

A recent revision has stipulated that now a returning student who has been on a government scholarship will be obligated to work two years for every year in training abroad. But again, the obligation to serve a requisite amount of time in one's Ministry upon return is enforced or not enforced according to Ministerial discretion.

(6) Records and Follow-Up.

The principal records kept at the CPO are the correspondence files on grants, grantees and liaison matters, basically through departure. A format has been devised to serve as a register of training correspondence, noting the item, date, and action taken. However, the staff has not been able to find time to use this. To date only AID and the British Council have helped occasionally in sending over their own records for the CPO file. Records on under-graduates are kept at the Ministry of Education, subject to call by the CPO if they are needed for planning purposes. It is the CPO Planning Department that keeps overall statistics, but these are incomplete. For instance, they have a table on "all" degree candidates sent abroad until 1976/77, according to country and area of specialty. But a number of known countries and cases are omitted. And the 10% of those abroad who are in the non-degree category are not tabulated.

There are no known government records of a follow-up variety for trainees who have returned.

4. Assessment and Discussion.

(1) Planning and Coordination.

The process and attributes of "coordinated planning," as they are usually conceived, tend to depend upon a number of preconditions. For instance, they may presuppose a bureaucratic order with a potential for rational bases for decision-making, rather than one where personal power,

interest and influence predominate. They may assume a reasonably developed administrative infrastructure among ministries, with educated and stable personnel. And they may require a planning mentality and a sufficient information gathering system upon which to base planning. There is a serious question if, in a country such as Yemen where these conditions do not exist, the concept of coordinated, cross-sectoral planning is feasible, at least in the foreseeable future. The most promising option may well be to have one body, like the CPO, take the lead in planning and instigating others. In the meantime, conditions, educated personnel and data gathering in other sectors may develop to allow more participation in this process. In any case, much of the structure and functions of cross-sectoral planning, priority setting and almost operational guidance included in the Law of 1975 seem to be premature.

In a short time the CPO appears to have made a good start in providing a basis for planning from one sector, at least in terms of making educated guesses with limited data. For some time it may not be possible to do more than urge other ministries to respond on an opportunity-by-opportunity basis to training offers as opposed to a regular system of orchestrating projected needs and plans for training on the part of ministries. But even the CPO's section for training is inundated by the mere task of processing requests, and cannot begin to get into such things as systematic priority setting, monitoring and follow-up. On top of this, stability of personnel poses another

problem. Two of the three staff people handling this sector are scheduled to leave in the coming months for study abroad, leaving the most junior member as the only continuity.

(2) Nominations and Selection.

The present procedures obviously involve a number of biases in regard to whom is nominated for training opportunities. Favored are those who have some foreign language to begin with, who have good contacts, and who are closest to the center (Sana).

Over and above this, there are a series of constraints on nominations being made. The basic one has to do with the still limited output of the Ministry of Education school system, the small supply of qualified candidates. Another is the demand in different agencies to keep the more able people to carry out administrative and project work. Even though training priorities were set for Agriculture, Public Works, Education and the University, the low responses to announcements from Agriculture, PW and Education are said to be partly due to their need of personnel for project work. Some of the low response is due to administrative confusion within a ministry. At Education, for instance, notices for non-degree training have been lost, went to the wrong place or not transferred. Also some officials have dragged their feet for fear of giving an advantage to a potential competitor through training, or an expatriate advisor who opposes sending women abroad. Even when nominated, a candidate may be slow to show up, or not show up at all,

due to a lack of interest in a non-degree program, the prospect of having to spend time on language preparation, etc.

In this context, it is understandable that nomination of those offered by a ministry amounts to selection.

(3) Return and Placement.

While the regulations instituted to assure the return of trainees, notably those with degrees, look firm, there are many loopholes. Since everything depends upon ministerial enforcement, there is no assurance that a new minister a few years hence will hold a trainee or his commercial sponsor to repayment in the case of default. Commitments tend to be personal rather than institutional, and the personal channels for exceptions are pervasive. Universities abroad may not cooperate in giving diplomas to the cultural attache, or the student may be able to get second copies.

Upon return, the requirement of staying in the same ministry, or serving one or two years for each year away, have been negotiable in the past. A returnee to a ministry like Education, for instance, could well be encouraged to look elsewhere when administrative log-jams delay appointments, result in late salary payments and low increments. Personal influence, and the desire to move to a sector, public or private, where one can earn more money directly or on the side, have sometimes resulted in sector changes and taking jobs that are not in the specialty area for which one was trained. Due to nothing

more than personal contacts and influence, one secondary graduate can get a YR 1,200 job while another with the same education will get YR 400. The norm for university level graduates is YR 900-1000, but much more can be obtained in the private sector, to say nothing of the oil states.

Non-degree trainees represent an advantage in that they are more apt to return to their function, but they may get less or even have been replaced upon their return. Rather than using the "stick" approach, as is the norm, there is a need for "carrots" in strategic skill sectors where one has had appropriate training in order to encourage a training-function fit. But such a measure of using selected incentives would require a Presidential level decision.

While other macro-level recommendations could be made, in view of the foregoing analysis, probably the most feasible developmental efforts could be focused on the CPO. Assuming that will continue to be the locus of most potentially effective activity in the foreseeable future, it would be well to strengthen the Loans and Technical Assistance Department, and the Scholarship Section under it. This could involve a personnel policy that would attract, train and hold an adequate number of qualified people. This, in fact, would be a prerequisite before outlining improvements in procedures and record keeping. At present it is not possible to even fulfill the existing guidelines for functions there, let alone absorb additional functions

such as planning, evaluation and follow-up activities. In the interim these could be done by occasional outside ad hoc surveys or studies; with sufficient personnel, these could/should be done with them as an in-service training exercise that could be sustained afterwards. But in advance of sufficient, appropriate personnel on location, any design for new procedures or data collecting (such as the Harvard proposal) would no doubt go the way of the Law of 1975.

PART II

MANPOWER PLANNING IN THE YEMEN ARAB REPUBLIC

PART II describes the manpower demand and supply situation, assesses the adequacy of existing data and projections and argues the need for greater manpower planning in the Yemen.

A. MANPOWER REQUIREMENTS

1. Description of Manpower Demand in the Yemen

The Yemen Arab Republic's first census was held in February 1975. The enumerated population was 4.5 million, though official estimates of the total population within the Yemen was 5.2 million, including estimates of the population in uncovered areas and of under-enumerated population. There are also a large number of Yemenis living and working abroad, particularly in Saudi Arabia and the Gulf States. The preliminary official census estimate for Yemenis living outside of the Yemen was 1.2 million. However, recent tabulation of Yemen census data as well as analysis of remittances, immigration statistics and census data of other countries in the region suggest a lower estimate of about half a million Yemenis living abroad.

Data processing of the census results will not be completed for at least another year. However, there are now results available of a 3 percent sample of the census that gives some details of the manpower situation in the Yemen.

Of the enumerated population, about 2.9 million or 63 percent are of work-age and represent potential manpower. However, only about 40% of that manpower is actually in the labor force. This low labor force participation rate is due largely to the minimal participation of

of women in the labor force.^{1/} The labor force in the Yemen is estimated to be about 1.1 million. This figure does not include the half million Yemenis living abroad, most of whom are thought to be in the labor force. (see table 17).

The 3 percent sample presents information about distribution of employment in the Yemen by industry and by occupation. From this it appears that about 90 percent of employment is in traditional sectors such as agriculture, trade and services. Only about 2 percent of employment is in the highly skilled occupational categories of professional, technical, administrative and managerial workers. (see tables 18 and 19).

Another source of data about manpower in the Yemen is the 1975 manpower survey. The survey was designed to estimate Yemen's educated manpower and covers only those sectors most likely to employ skilled manpower. The survey covered only the "modern wage" private sector ^{2/} and the public sector which together has an estimated employment of 90 thousand. Thus, this survey covered only about 8 percent of total employment in the Yemen Arab Republic. Of the 53 thousand employed in the "modern" private sector, most were in trade, manufacturing, construction and services. Government employed about 37 thousand; of these, the Ministry of Interior employed about 12 thousand, the Ministry of Education 4,000, and the Ministries of Health, Finance and Municipality about 2,000 each. (see tables 20 and 21).

^{1/} Definitions used in the census and responses may be misleading; rural women are commonly seen helping in the fields or tending animals.

^{2/} This "modern" wage private sector is really the definable employment of the five major cities and includes establishments of all sizes.

Table 17 - Yemen Manpower and Labor Force, 1975 ^{1/}

	Total Population (enumerated)	Manpower (Work-age)		Labor Force		
		No.	% of Pop.	No	% of Manpower	% of Pop.
Male	2,155,234	1,291,356	59.9	997,957	77.3	46.3
Female	2,371,092	1,561,494	65.9	137,772	8.8	5.8
Total	4,526,326	2,852,850	63.0	1,135,729	39.8	25.1

^{1/} 3 percent census sample.

Table 18 - Employed and % distribution of employed by industry, 1975^{1/}

Industry	% of Total	No. of Workers
Agriculture, forestry, hunting and fishing	73.26	785,462
Mining and quarrying	0.06	659
Manufacturing	3.48	37,260
Electricity, gas and water	0.11	1,149
Construction and building	4.35	46,656
Wholesale and retail trade and restaurants and hotels	6.73	72,146
Transport, storage and communication	2.40	25,766
Financing, insurance, real estate and business service	0.19	2,016
Community, social and Personal service	9.42	101,055
TOTAL	100	1,072,169

Unknown and not stated are prorated.

^{1/} 3 percent census sample.

Table 19- Employed and % distribution of employed by occupation, 1975 ^{1/}

Occupation	% of Total	No. of Workers
Professional, technical and related workers	1.6	16,658
Administrative and managerial workers	0.5	5,873
Clerical and related workers	1.3	13,714
Sales workers	5.0	53,288
Service workers	5.6	60,273
Agricultural, animal husbandry and forestry workers, hunters and fishermen	72.9	781,530
Production and related workers, transport equipment operators and labourers	13.1	140,833
TOTAL	100	1,072,169

Unknown and not stated occupations are prorated.

^{1/} 3 percent census sample.

Table 20- FINAL RESULTS OF MANPOWER SURVEY BY ECONOMIC SECTOR
AND FOR GOVERNMENT EMPLOYMENT IN 1975

<u>Economic Sector</u>	<u>Number</u>	<u>%</u>
Agriculture	200	0.4
Mining and Quarrying	51	0.1
Manufacturing	8,473	16.1
Electricity, Gas & Water	870	1.6
Construction	7,950	15.1
Wholesale & Retail Trade	27,570	52.3
Transport, Storage & Communications	1,047	2.0
Finance, Insurance & Real Estate	1,126	2.1
Community & Personal Services	<u>5,422</u>	<u>10.3</u>
*TOTAL	52,709	100.0
<u>% of Grand Total</u>		<u>58.4</u>
Government	37,471	
<u>% of Grand Total</u>		<u>41.6</u>
GRAND TOTAL	90,180	

* For five major cities.

Table 21

Government Employment in Major Ministries, 1975 ^{1/}

<u>Ministry</u>	<u>Men</u>	<u>Women</u>	<u>Total</u>	<u>%</u>
Education	4,064	287	4,351	13.9
Health	1,783	416	2,199	7.0
Finance	2,030	11	2,041	6.5
Municipality	1,833	269	2,102	6.7
Highway Authority	912	3	915	2.9
Agriculture	412	8	420	1.3
Central Bank	328	60	388	1.2
Public Works	324	8	332	1.1
TOTAL	11,686	1,062	12,748	40.7
<hr/>				
Interior	11,512	--	11,512	36.7
Other	6,961	94	7,055	22.6
GRAND TOTAL	30,159	1,156	31,315	100

The manpower survey revealed that even in the so-called "modern" private sector and public sector, the educational attainment level of employees was low. In the modern private sector 73 percent of the employees were either illiterate or had no formal schooling; only 4 percent are secondary school graduates or higher. In the government, 75 percent of the total employees are either illiterate or had no formal schooling and only 7 percent have secondary school certificates or higher. (see tables 22 and 23).

Generally, an occupation has associated with it an assumed degree of training or education. To get an idea of the current educational inadequacies, the actual educational backgrounds of employees within each occupational category were compared to the required education. In both the modern private sector and the public sector, large percentages of employees in all occupational categories did not have the required education or training to do their job affectively. 78 percent of the employees in the public sector and 85 percent of the employees in the private sector were without required educational qualifications. (see tables 24 and 25).

The statistics collected in the manpower survey were used in a manpower report written by Clive Sinclair and James Socknat. ^{1/} The report made projections of demand and supply of manpower in the

^{1/} Assessment of Manpower Development and Policy and Programme Suggestions for the Yemen Arab Republic, 1976 by C. A. Sinclair, ILO Manpower Consultant and J. Socknat, ILO Ford Foundation, Manpower Planning Expert, Jan. 1976.

Table 22

Educational Attainment of Modern Private Sector Employees, 1975 1/

	<u>Number</u>	<u>Cumulative Percent</u>
University Degree or Higher	200	0.4
3-5 years Post Secondary	36	0.5
1-3 years Post Secondary	117	.8
Secondary School Completion	1,732	4.4
9 but less than 12 years schooling	2,616	10.0
6 but less than 9 years schooling	3,944	18.4
4 but less than 6 years schooling	2,589	23.9
Less than 4 years schooling	1,632	27.3
Non-formal education	19,282	68.3
Illiterate	<u>14,923</u>	<u>100.0</u>
TOTAL	47,071	100.0

1/ Manpower Survey

Table 23

Educational Attainment of Government Employees, 1975 ^{1/}

	<u>Number</u>	<u>Cumulative Percent</u>
University Degree or Higher	691	2.2
3-5 years Post Secondary	256	3.0
Secondary School Certificate	1,243	6.9
9 but less than 12 years schooling	1,162	10.7
6 but less than 9 years schooling	1,594	15.7
4 but less than 6 years schooling	2,784	24.6
No formal education	18,434	83.5
Illiterate	<u>5,160</u>	<u>100.0</u>
TOTAL	31,324	100.0

1/ Manpower Survey

Table 24-Number of Employees in Government Sector With and Without Required Education or Training, 1975 1/

Occupational Group	No. with Required Education or Training	%	No. Without Required Education and Training	%	Total
Total	6,851 ⁰	21.8	24,473	78.2	31,324
A-1	194	81.6	44	18.4	238
A-2	398	16.9	1,969	83.1	2,367
B-1	40	39.3	62	60.7	102
B-2	78	7.6	947	92.4	1,025
B-3	1	5.3	18	94.7	19
C-1	763	10.9	6,259	89.1	7,022
C-2	3	0.1	12,319	99.9	12,322
D-1	102	7.8	1,222	92.2	1,324
D-2	4	1.8	225	98.2	229
E	768	35.3	1,408	64.7	2,176
F	4,500				4,500

Table 25 - Number of Employees in Private Sector With and Without Required Education or Training, 1975 1/

Occupational Group	No. with Presumably Required Education or Training	%	No. Without Presumably Required Education or Training	%	Total
Total	7,125	15.1	39,952	84.9	47,077
A-1	70	27.0	142	67.0	212
A-2	69	31.7	149	68.3	218
B-1	4	15.0	22	85.0	26
B-2	26	4.0	610	96.0	636
B-3	2	0.1	1,256	99.9	1,258
C-1	1,530	4.0	22,244	94.0	23,774
C-2	67	3.7	1,781	96.3	1,848
D-1					
D-2	78	2.0	3,563	98.0	3,641
E	1,293	11.3	10,185	88.7	11,478
F	3,986				3,986

public and modern private sectors from 1975 to 1980. The projections were disaggregated according to occupational categories where possible.

Manpower requirement projections for the public sector were based on a questionnaire asking each ministry to state their manpower needs during 1975-1980 for new projects, for upgrading and replacing existing staff and for expansion plans. 2/

Manpower requirements for the "modern" private sector were projected for 1975 to 1980 in the following way. The occupational composition of the various "modern" economic sectors were given for the base year by the survey results. Projections of total employment in each sector were made simply by assuming a growth rate that seemed reasonable. The occupational composition within each sector was assumed to remain constant over the projection period. 3/

The demand projections also considered factors such as replacing non-Yemenis and replacing those who would die or retire.

2/ The ministries had great difficulties with the questionnaires and in many instances the manpower team had to assess a ministry's new projects and desired organizational structure themselves to estimate the ministry's manpower needs.

3/ This approach is simplistic, but more sophisticated approaches would require data that is lacking such as GDP by sectors, technological change, productivity increases and changing composition of the labor force.

The manpower report estimated that for 1975-1980, the number of additional jobs that would be available in the private sector would be 15,726 and in the public sector would be 12,952. Thus, the additional manpower demand in these modern sectors for the five years would be 28,678. Assuming that 266 non-Yemenis would be replaced as well as 2,735 that retire or die, the total net job opportunities for 1975-1980 was estimated to be 31,674. Of these net job opportunities, only about 2 thousand would be in occupations requiring a university degree, 3 thousand requiring post-secondary education and 14 thousand requiring secondary school certificates. (see tables 26 and 27).

The manpower report also made two sets of projections of the supply of educated manpower produced by the education system. The first set of supply projections assumed that school dropout, repeat and accession rates that were calculated from historical data 1/ would remain constant in the projection period. The second set of projections assumed a decrease in dropout and repeat rates at the primary level and a decrease in accession rates to higher levels in accordance with the report's projected manpower demand. In both sets the number of primary entrants into the first grade are assumed to be increasing at the same rate, 2/ but due to assumed primary school improvements in set 2, more complete primary education

1/ Sinclair found raw data from an 85 percent sample of schools from 1967-68 to 1973-74 from which he calculated these rates.

2/ Based on historical trends in entrance rates.

Table 26 - Composition of Demand, 1975 - 1980.

Occupational Category	Public Section	%	Private Section	%	Total
Professional & Technical Occupations Presumably Requiring a University Degree.	1,449 (11.2%)	87.5	198 (1.3%)	12.2	1,647 (5.7%)
Sub-Professional & Technician Occupations Presumably Requiring One to Three Years Post Secondary Education	1,951 (15.1%)	73.2	713 (4.6%)	26.8	2,664 (9.3%)
Skilled office & manual occupations presumably requiring secondary completion.	3,987 (30.8%)	31.4	8,705 (55.3%)	68.6	12,692 (44.2%)
Semi-skilled Office and Manual Occupations Presumably Requiring Preparatory Completion	4,988 (38.5%)	82.5	1,056 (6.7%)	17.5	6,044 (21.1%)
Semi-skilled Occupations Presumably Requiring Functional Literacy Plus On-the-job Training	495 (3.8%)	10.7	3,647 (23.1%)	29.3	4,142 (14.5%)
Unskilled Occupations Presumably Requiring No Special Education or Training.	82 (0.6%)	4.4	1,410 (9.0%)	95.6	1,492 (5.2%)
ALL OCCUPATIONS	(100.00%) 12,952	-	(100.00%) 15,726		(100.00%) 28,678

Table 27

Summary Table of Demand and Supply by Occupational Category, 1975-1980

Occupational Category	Additional Jobs 1975-1980 Private Sector	Additional Jobs 1975-1980, Public Sector	Total Additional Modern Sector Jobs 1975-1980	Non-Yemenis in 1975	Yemeni Vacancy due to Death & Retirement 1975-1980	Total Net Job Opportunities 1975-1980	Supply (3871) 1975-1980	Shortage (-) or Surplus (+)
ALL OCCUPATIONS	15,726	12,952	28,678	266	2735	31,674	290,415	+ 267,739
A-1 Professional Occupations Presumably Requiring a Science/Maths Based University Degree	105	1,045	1,150	145	22	1,317	1,373	+ 56
A-2 Occupations Presumably Requiring an Arts Based University Degree	93	404	497	25	80	602	5,364	+ 4,762
B-1 High Level Technician Occupations Presumably Requiring Three to Five Years Post Secondary Science/Maths Based Education	10	31	41	7	5	53	9	- 44
B-2 Sub-Professional and Technician Occupations Presumably Requiring One to Three Years Post Secondary Science/Maths based Education	277	345	622	22	58	702	122	- 580
B-3 Other Sub-Professional and Technician Occupations Presumably Requiring one to Three Years Post Secondary Education	426	1,575	2,001	1	56	2,058	358	-1,700
C-1 Skilled Office Occupations Presumably Requiring Secondary School Completion Plus Job Training	8,079	3,636	11,715	47	955	12,709	1,091	- 10,718

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Table 27 continued	Additional Jobs 1975-1980 Private Sector	Additional Jobs 1975-1980 Public Sector	Total Additional Modern Sector Jobs 1975-1980	Non-Yemenis in 1975	Yemeni Wastage due to Death & Retirement 1975-1980	Total Net Job Opportunities 1975-1980	Supply (95%) 1975-1980	Shortage (-) or Surplus (+)
Occupational Category								
C-2 Skilled Manual Occupations Presumably Requiring Secondary Completion Plus Pre-Vocational and/or Training Related Class- room Instruction	626	351	977	8	445	1,430	224	- 1,206
D-1 Semi-skilled Office Occupations Presumably Requiring Preparatory Completion	-	4,983	4,983	-	173	5,156	3,165	- 1,991
D-2 Skilled Manual Occupations Presumably Requiring Preparatory Completion Plus Pre-Vocational and/or Training Related Classroom Instruction	1,056	5	1,061	4	134	1,199	737	- 462
E Semi-skilled Occupations Presumably Requiring Functional Literacy Plus Job-Training	3,644	495	4,139	7	455	4,604	10,678	+ 6,074
F Unskilled Occupations Presumably Requiring no Special Education or Training	1,110	82	1,192	-	352	1,844	275,391	+ 273,550

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there than in set 1. The second set of education projections has significantly lower numbers of enrollments at education levels above primary. The report argued that set 2 was the more desirable education policy since it reflected more the limited needs for educated manpower estimated in the manpower demand projections.

The report's conclusions about higher educated manpower bottlenecks are quoted:

"The analysis of this situation shows that by 1980 there will be in aggregate an approximate equality of demand for and supply of University Graduates. However, there is no guarantee that appropriate courses to the needs of the YAR are being taken, now that the appropriate number are enrolled. In fact very little is known about the number of students abroad, their field of specialization, or their date of return.

"There is every likelihood that for the next five years manpower bottlenecks will remain a major impediment to the development of the YAR, and also that unless coordination and control is made of the subjects which students study abroad, too many or too few graduates in particular specialization, will result.

"If the analysis made is correct, then the long term position is, that after 1980, a huge excess supply of graduates over job opportunities for graduates will result.

What is at present a "Manpower Bottleneck" problem will transfer into a "graduate unemployed" problem." 1/

The report concludes that if set 1 supply projections are assumed, by 1980 there will be an approximate equivalence of demand and supply in professional and technical occupations requiring a science/maths based university degree and a surplus of supply of graduates with arts based degrees. However, within the science/maths degree category, surpluses and shortages are likely to occur in specific occupations. For example, there would a shortage of statisticians, teachers and certain types of engineers and surplus of medical doctors and economists. The report reveals that for sub-professional, technical and skilled occupations there will be substantial shortages in the next five years.

The manpower report has met with substantial opposition within the YARG and was not used as a basis for their Five Year Education Plan. The report's conclusion of a potential oversupply of educated manpower at some levels before 1980 and at many levels after 1980, given current education trends, was not received happily or without criticism. Objections were raised that the demand for educated manpower had been severely underestimated in the report, and that there were other social and cultural objectives to be considered in expanding education besides meeting the economy's manpower requirements.

Another source of data about manpower demands in the public sector may be available in the next few months. As a part of the

1/ Sinclair and Socknat, op cit, p. 2.1.

Five Year Plan, the ministries were asked to prepare, as part of their plan, estimates of their manpower needs.

2. Assessment of Adequacy of Existing Data and Projections

As was seen, there are a number of sources of data that reveal dimensions of the manpower situation in the Yemen Arab Republic. However, the two major sources, the census sample and the manpower survey were both completed in 1975 and are already out-of-date. There is a need to refine the survey technique used in the 1975 manpower survey and to repeat the exercise on a continual, annual basis. Furthermore, there are important areas, such as Yemeni manpower abroad, for which very little data is available. The manpower report made a strong case for filling this gap:

"The prevalence of migration from the Yemen Arab Republic to countries abroad for employment is known to be extensive. Moreover, the significance of remittances for the balance of trade of the Yemen Arab Republic is also recognised. Little is known about the duration of stay abroad, the type of work obtained, if skills are acquired on-the-job or not, the use of remittances for domestic investment or personal consumption, the effect of migration on rural-to-urban migration in the Yemen Arab Republic. In short, migration has a considerable significance for the development of the Yemen Arab Republic, and little is known about its impact.

"In devising a Manpower Strategy for the Yemen Arab Republic some recognition of the changing patterns of job opportunities abroad is necessary. To determine this, and the current significance of migration for the economic development of the Yemen Arab Republic, more information is required than is currently available. It is suggested that steps be taken to remedy this data gap by a sample survey of the Yemeni work force abroad, and the returnees at home." ^{1/}

Saudi Arabia, which absorbs a large number of Yemeni workers, has recently taken a manpower survey that, if released, will provide details about the numbers and characteristics of Yemenis working in Saudi Arabia. Also, the CPO, perhaps with AID assistance, plans to take a migration survey in the Yemen that will gather data about the magnitude and direction of migration flows within the country and abroad as well as specific information about remittances and the impact of migration on the Yemen economy.

With regard to manpower demand projections, the only attempt made for the YAR was in the Sinclair-Socknat manpower report. The adequacy of these projections has been questioned not only by critics within the YARG but also by the authors themselves.

Critics have argued that the report underestimates skilled manpower needs. In the public sector, attempts to estimate future needs by questioning ministries about their plans met in many cases

^{1/} Sinclair and Socknat, op. cit., pl. 23

with no response or unreliable responses. It is likely that the ministries were unable to foresee accurately their future needs and gave underestimates. Furthermore, it was argued that the employment projections in the private modern sector, averaging^a rate of growth of under 6 percent, were unduly pessimistic. Also, the private sector projections only considered the demand for educated manpower in the five major urban areas in the Yemen. Thus, any demand for educated Yemen manpower in less populated areas of the Yemen or abroad was not included. Finally, the projections did not consider the need to replace or upgrade those currently employed who were underqualified; as we have seen this is a substantial proportion of the modern sector's employment. 1/

On the other hand, there is a likelihood that the report's supply projections of highly educated manpower was also underestimated. The only statistics on Yemeni students studying abroad that the authors could locate were those registered with the Ministry of Education. Though the Ministry of Education probably handles the majority of student applications for study abroad, it may exclude some scholarships and non-degree training programs offered by embassies and aid agencies and also those students paying their own tuition.

In defense of the manpower report's authors, it must be remembered that the analysis and projections were a short-term

1/ Nor was the need to replace Non-Yemeni teachers included.

one-time effort in a very data scarce country. Given the report's shortcomings, the YARG is probably correct in assuming that the report's projections are an inadequate basis for manpower and education planning. The authors themselves have acknowledged its shortcomings and have argued for the need for a manpower planning unit to be set up permanently in the CPO to make continual manpower surveys and projections. 1/

1/ Sinclair and Socknat, op cit, pp. 2.10 to 2.13.

B. MANPOWER SUPPLY

1. Description of Education in the Yemen

The 3 percent census sample has indicated the educational composition of the Yemen population. Of the total population aged 10 years and above, 98 percent have not even completed primary school and 81 percent are completely illiterate. Furthermore, the census sample reveals the unequal distribution of education between the sexes. Of those with primary school or higher, only 15 percent are female.

Table 28 - Population Age 10 and Over
by Educational Attainment

	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Percent</u>
Total	1,351,455	1,598,161	2,949,616	<u>100</u>
NS	6,069	7,635	13,704	.5
Univ. Degree	4,530	366	4,896	.2
Sec. Cert.	6,705	1,469	8,174	.3
Prep Cert.	9,610	1,375	10,985	.4
Prim. Cert.	15,875	3,059	18,934	.6
Can read and write	305,507	23,463	328,970	11.2
read only	154,672	14,751	169,423	5.7
Illiterate	848,487	1,546,043	2,394,530	81.2

Schools in the Yemen are divided into four levels: Primary, Preparatory, Secondary and University. The number of grades and the theoretical age groups are as follows:

Table 29 - Education Levels

	<u>Grade</u>	<u>Age Groups</u>
Primary	1-6	6-11
Preparatory	7-9	12-14
Secondary	10-12	15-17
University	13-16	18-21

In reality, there is an enormous distribution of ages at each level.

Modern education in the YAR began only in 1963. By 1970 there was a small network of primary, preparatory and secondary schools and thereafter social demand and enrollments grew rapidly. Almost all educational investment was financed by aid from neighboring Arab states or international aid agencies. The preparatory and secondary schools have been staffed largely by expatriate teachers, particularly Egyptians. The primary school teachers have been recruited from among Yemeni primary school graduates or even dropouts.

In 1975/76 enrollments at each level of education looked as follows:

Table 30 - Enrollments 1975/76

	<u>Males</u>	<u>Females</u>	<u>Total</u>
Primary	224,700	27,780	252,480
Preparatory	14,440	2,090	16,530
of which general	13,930	1,630	15,560
of which teacher training	510	460	970
Secondary	--	--	6,928
of which general	6,050	470	6,520
of which teacher training	--	--	408
of which technical	348	0	348
of which commercial	210	0	210
Sana University	2,162	246	2,408
of which education	597	51	648
of which other faculty	1,565	195	1,760

Source: Ministry of Education

From this table, several things become clear. First, education for males has developed more rapidly than for females. Female students are about 11 percent of total students. Another thing that is evident is a relatively severe educational pyramid; for every child in secondary school, there are 2.4 in preparatory school and 36.4 in primary school. A similar pyramid is evident within the grades in primary schools:

Table 31 - Primary Enrollments, 1975/76

	<u>Males</u>	<u>Females</u>	<u>Total</u>
Grade 1	94,830	11,066	105,896
Grade 2	53,781	5,761	59,542
Grade 3	34,696	4,424	39,120
Grade 4	20,185	3,114	23,299
Grade 5	12,073	1,997	14,070
Grade 6	9,283	1,416	10,699

Thus, of 10 students entering the first grade, only about 6 make it to second grade and only 1 makes it to the sixth grade. The high dropout rates at the primary level are forced on many students due to the fact that in many rural villages the schools have only a few grades. Of all primary schools, only 13 percent have all 6 grades. The major problem is shortage of qualified teachers. In the past, teachers have been given very low wages making it a very unattractive profession. Recently, a new civil service law was passed which will pay teachers with a given educational attainment, the same pay that they could earn working elsewhere in the government, plus a bonus for those going to rural "hardship" posts. This change should help ease the teacher shortage.

Of those students who graduate from primary school, accession or continuation rates are high. That is, large numbers continue on

to intermediate level, to secondary level and then to Sana University or scholarship opportunities abroad. These higher education opportunities create a manpower problem in the mid-level skills. Students have been unwilling to stop with intermediate or secondary education if Sana University or scholarships abroad were alternatives. As a result, lower level technical, commercial and teacher-training schools have been having trouble recruiting students. Also, once graduated, the students of these schools have frequently gone back for higher education rather than entering the labor force with their newly acquired skills. This problem has been compounded by the bureaucratic shortcomings and poor salaries offered by a major employer--the public sector. 1/ Recent changes in the civil service salary structure for teachers and nurses may draw more graduates of the specialized institutes into these professions.

A Five Year Education Plan has been drafted by the Ministry of Education . The plan includes description, analysis and policy guidelines for the education system. Enrollment projections or targets by sex, education level and type of school are included in the plan. As mentioned earlier, these enrollment targets were not based upon a study of manpower requirements.

In the Five Year Plan, primary enrollments for boys is targeted to expand from 224,700 in 1975/76 to 352,300 in 1980/81. This represents an increase in the enrollment ratio 2/ from about 49 percent to 70 percent

1/ Traced studies of the employment experience of graduates of the Sana Technical School (Chinese School) and the Health Manpower Institute support this conclusion.

2/ That is, enrollments divided by the relevant population, age group 6-11 years

by the last year of the plan. Primary enrollment for girls is targeted to expand from 27,780 in 1975/76 to 74,560 in 1980/81, or from a 6 percent enrollment ratio to 30 percent.

Table 32 - Primary Enrollment Targets

	<u>Males</u>	<u>Females</u>
1975/76	224,700	27,780
1976/77	253,100	33,840
1977/78	274,500	41,190
1978/79	290,270	49,320
1979/80	323,900	61,350
1980/81	352,300	74,560

The plan projects enrollments at the preparatory level according to three types of schools: general, teacher training and vocational schools. The vocational schools, to be built by an IBRD project, will begin operating in 1978/79 and will not enroll any females.

Table 33- Preparatory Enrollment Targets

	<u>General</u>		<u>Teacher-Training</u>		<u>Vocational</u>
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>	<u>Males Only</u>
1975/76	13,930	1,630	510	460	0
1976/77	16,260	2,150	740	550	0
1977/78	19,150	2,740	920	700	0
1978/79	22,690	3,070	1,245	880	200
1979/80	22,620	3,540	1,645	1,065	580
1980/81	29,500	3,950	2,090	1,200	930

At the secondary level, there will be four major types of education available: general, technical, commercial and teacher training. Currently there is only one technical secondary school located in Sanaa (the Chinese School), but the IBRD is planning another technical school in Taiz as well as two agricultural schools in Ibb and Surdud and a veterinary school in

Sanaa. These schools are for males only. The current commercial secondary school is also only for males, but there is a proposal in the plan, as yet without a donor to fund it, for developing a commercial school for women.

Table 34 - Secondary Enrollment Targets

	General		Commercial		Technical Males Only	Teacher-Training Males & Females
	Males	Females	Males	Females		
1975/76	6,050	470	210	-	348	408
1976/77	6,250	570	205	-	279	550
1977/78	8,590	760	280	-	293	655
1978/79	10,020	1,050	400	37	603	845
1979/80	11,720	1,390	510	69	1,033	1,087
1980/81	13,750	1,760	535	161	1,410	1,364

Sana University currently has 2,408 students in five faculties: law and Islamic law, arts, commerce, science and education. The education faculty has few courses of its own and the education majors also specialize in the other fields. In 1975/76 the distribution of students among the faculties were as follows:

Table 35- Enrollments at Sanaa University, 1975/76

<u>Fields</u>	<u>Non-Education Students</u>		<u>Education Students</u>	
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>
Law & Islamic Law	261	7	-	-
Arts	265	87	386	38
Commerce	976	84	100	3
Science	63	17	111	10
TOTAL	1,565	195	597	51

Currently the projections for Sana University enrollments in the draft Five Year Plan look like this:

Table 36 - Sana University Enrollment Projections

	<u>Non-Education Students</u>	<u>Education Students</u>
1975/76	1,600	630
1976/77	2,700	810
1977/78	3,680	840
1978/79	4,820	1,090
1979/80	5,665	1,420
1980/81	6,300	1,740

Though the enrollment targets at the lower education levels in the draft plan have been accepted by the YARG, the proposed targets for Sana University have been questioned by the Prime Minister and still may be lowered substantially. Also, target projections have not yet been made of university enrollments by field; a UNESCO team will consult the YARG on this in the near future.

Sana University is the YAR's only university, and as yet the subjects taught are limited. Thus, to fill the high level manpower requirements in many fields, Yemenis must be sent to foreign universities. Data on the number of Yemenis studying abroad is scattered and incomplete. The Ministry of Education controls most undergraduate scholarships and keeps records of their nominees. Students studying on their own and some on scholarships are not recorded. The most complete list is

probably one collected by the CPO, which estimates a total of 1321 Yemeni students have been sent abroad for degree education as of 1976/77. From this list, it is obvious that the Soviet Union has trained the most students. Yemenis have been studying in the Arab countries (658), the Soviet Union (362), Eastern Europe (130), China (41) and Western Europe (30). The fields that students abroad were studying include: engineering (429), medicine (420), agriculture (137), sciences (93), and arts, law and social sciences (335). (See table 37).

Recently a law was passed that will restrict the fields that Yemenis on undergraduate scholarships abroad may take to engineering, medicine and agriculture. 1/ Another new restriction is that only those secondary school graduates with grade scores of 75 or better are eligible to go abroad on scholarships, 2/ while those having scores of 60 to 75 can go to Sana University. Only the top 10 secondary student graduates are exempt from government service; the others must work for the Ministry of Education before becoming eligible for a scholarship.

1/ These restrictions do not apply at graduate levels.

2/ AUB scholarships were given only to students with scores of 85 or better.

CPO/YAR

Table 37- STUDENTS SENT FOR STUDY ABROAD AS OF 1976/77

ACCORDING TO FIELDS OF STUDY AND HOST COUNTRIES

	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	
HOST COUNTRIES																										
SUBJECT FIELD	TOTAL	Kuwait	Iraq	EGYPT	Libya	Syria	Saudi Arabia	Algeria	Sudan	United Arab Emirates	Qatar	Lebanon	USSR	Romania	Yugoslavia	Czechoslovakia	Hungary	East Germany	Bulgaria	China	West Germany	Iran	Turkey	Greece	Italy	
SCIENCES	93	13	6	7	3	1	10	10	-	-	-	-	33	3	2	1	-	-	-	-	-	2	-	-	-	
AGRICULTURE	137	-	19	37	6	9	-	-	-	-	-	-	51	3	5	1	3	-	-	-	1	2	-	-	-	
MEDICINE	420	-	38	93	1	19	12	11	3	-	-	3	131	18	3	21	19	16	4	-	3	12	2	7	4	
ENGINEERING	429	2	68	34	6	21	63	4	5	19	7	8	112	5	4	12	2	4	1	41	6	2	1	1	1	
ARTS/LAW/SOC.SCI.	335	9	32	-	55	40	83	16	2	-	10	-	68	2	1	2	-	3	1	-	1	-	3	-	-	
TOTAL	1321	11	157	64	68	89	158	31	10	19	17	11	362	28	13	36	24	23	6	41	11	23	6	8	5	

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These restrictions have an impact on the number of students eligible for scholarships abroad in any given year. For example, in 1975/76 there were only about 1200 science graduates from secondary school, of which perhaps 700 had grades of 75 or more, making them eligible for foreign scholarships.

The CPO's list of degree training abroad appears to be incomplete, especially with regard to scholarships to the United States and Western Europe. Nineteen former AUB students were recently transferred to United States undergraduate universities and 12 participants are currently working towards masters degrees. The British offer the YARG 25 post-graduate scholarships per year for high-level government officials. The programs are generally 1-to 2-year degree programs. Most go to Britain for training; since 1972 a total of about 60 have been sent under this program.

The statistics on scholarships give country of study but not sponsoring donor. Holland, West Germany and the United States have been financing scholarships for Yemenis in other Arab countries. Also, Yemen's oil-rich neighbors have been offering Yemen numerous undergraduate scholarships for within the Arab world. The scholarships offered by the Soviet Union and Eastern Europe are only to their own countries, not Arab countries.

The substantial amount of the YARG does not keep statistics on non-degree training of Yemenis. A host of non-degree, project-related training of Yemenis is occurring by nearly all bilateral and multilateral donor agencies involved in the Yemen.

A discussion of Yemen's education and training system would not be complete without mention of efforts in non-formal and adult education. The IBRD is developing seven non-formal education centers to be located in the provinces. Around each major center will be "front" centers in the villages. The type of training offered will depend on the particular village's environment and economy, but in general will include teaching literacy, agriculture, animal husbandry, hygiene, child care and family planning. The Five Year Education Plan estimates that by 1980/81 about 8,000 will be trained in the centers per year.

Another approach to adult education is outlined in the plan. Primary teachers will be given incentives to teach literacy to adults in the afternoons in the local, rural-school buildings. The plan projects to teach the following numbers of adults through this program:

Table 38 - Adult Education Program

	<u>Males</u>	<u>Females</u>
1975/76	1,560	190
1976/77	2,600	1,920
1977/78	3,900	2,130
1978/79	5,200	2,840
1979/80	6,500	3,550
1980/81	7,800	4,260

2. Assessment of Adequacy of Existing Data and Projections

Statistics on Yemen's education system is relatively good, though gaps exist. The census sample provides information on the levels of educational attainment of the whole population of the Yemen. Also, census information on the age structure of the population will enable reasonable estimates to be made of the current school-age population, information that is useful for establishing social demand and targets for the number of enrollments, schools, teachers and other facilities. Data is lacking about vital rates. Without estimates of fertility and mortality rates, projections of school-age population and of the labor force are difficult. A sample survey of vital rates in the Yemen would contribute to manpower planning efforts.

Statistics have been collected from the school system for several years. The types of information collected have included (a) the number

students by sex enrolled in various types of schools, (b) the number of teachers, classrooms and school buildings by type of school, (c) time-series data showing increases in enrollment for 1962/63 to 1975/76, (d) enrollment by governate, by grade and fields of study, and (c) nationality of teachers.

Until now, a serious data gap has been lack of drop-out, repetition, promotion and accession rates by grade level and type of school. Such information is useful for conducting student-flow analysis that indicates the educational inputs required to meet output targets. In the absence of this data, the Five Year Education Plan used a less desirable alternative of total wastage rates from grade to grade, calculated from the available time-series enrollment data. A school survey has just been completed by the Ministry of Education which soon will make available reliable estimates of these rates.

Statistics on Yemenis studying abroad, as indicated earlier, are in a mess. There is a need for centralization of this task, probably best done by the CPO. Data should include numbers studying abroad by type of training (type of degree or non-degree), place of training, by field of study, by donor agency, by ministry sponsoring the training and by date of graduation and return to the Yemen. Follow-up studies should be undertaken to check if participants sent abroad for education are returning and if they are working where intended and utilizing their training.^{1/}

^{1/} The survey of returned AID participants is the first of such follow-up studies to be done in the Yemen.

In assessing the adequacy of the Five Year Plan's education projections, a major shortcoming is that it was not based on any study of educated manpower requirements. Since these projections are the YARG's targets for the next five years, this has serious implications for future manpower shortages and surpluses. If there is a good match between manpower demand and supply, it will be by sheer chance. Other problems with the education projections of the plan are that the data base and rates used in the calculations may not be very accurate estimates, and that projections of Yemeni students studying abroad were not included. On the positive side, though, the fact that there are now quantitative education projections and targets in the plan is no small improvement.

C. COORDINATION AND PLANNING FOR MANPOWER DEVELOPMENT

1. Lack of Guidance in Education Planning and Training Programs Abroad.

The Yemenis have in a short time begun to develop a modern education system, including a university. They have also centralized and operationalized within the CPO a mechanism for sending Yemenis abroad for higher education and training that cannot be obtained in the Yemen. They have begun the process of collecting data that can be useful in evaluating and planning their education system and their training programs abroad. A draft of an education plan, including quantitative projections or targets, has been accomplished.

Nevertheless, some important weaknesses in data collection, planning and coordination remain. Despite a 1975 manpower survey and a report that projected manpower requirements, planning for expansion of the education system has gone on in a vacuum. Similarly, decisions regarding the size and fields of study for the foreign scholarships and training programs have been done on an ad hoc basis rather than on a planned basis of filling specific manpower requirements.

As discussed, the manpower report met with much criticism in the YARG and was not used as a guide for education planning. Given the poor statistical base and the need to make many assumptions, the report's manpower demand projections probably would not have been a reliable basis for planning education and training programs. Besides, by now the 1975 manpower survey is out of date.

There is a need for manpower requirement statistics to be taken on a continual, yearly basis, particularly in the public sector. That way, time-series data can be built up and trends estimated. Also, repetition will allow for improvements in data collection techniques as well as start public sector officials thinking about their ministry's manpower requirements.

Manpower demand projections ought to be refined and used as a basis for guiding education plans and for coordinating the training programs abroad. There is an urgent need to coordinate projections of manpower demand with supply if wasteful shortages and surpluses are to be avoided. Over the past five years shortages existed in nearly all occupations requiring education and skills, and thus nearly every scholarship and training course filled a need. However, if the 1976 Manpower Report's predictions are at all valid, selection of fields of study will become more critical in the future if oversupply and unemployment of educated manpower is to be avoided.

Nor are statistics on the supply side adequate, particularly with regard to scholarships and training programs abroad. There is need to collect accurate data on each donor's program, including numbers sent for training, type of education and field of specialization, location of training, numbers graduating and returning to the Yemen and follow-up studies analyzing utilization of training. This information ought to be tabulated and available for use by all donors as well as the YARG. Currently the data available in this area is scant and inadequate as a basis for donor coordination.

2. Recommendation for a Manpower Planning Unit

There is an urgent need for a permanent manpower planning unit capable of collecting data, making projections and analyzing manpower problems on a continual basis. The unit should logically be placed within the Central Planning Organization of the YARG, which has the responsibility for overseeing the plans of the other ministries. The unit should not be part of a donor mission or independent, since it is important that the unit's analysis and projections be used to guide the Government's plans for their education system and their training programs abroad. The unit should coordinate closely with the Ministry of Education in its plans for expansion of the in-country education system. The Scholarships Office of the CPO, currently responsible for implementation of the scholarships and training programs abroad, could possibly be placed within the manpower planning unit, so that planning and implementation could be closely coordinated in this area.

The unit should be staffed by two full-time foreign advisors for two years. Longer-term success of the unit will depend upon recruiting and keeping capable Yemeni counterparts with Masters degrees in economics/manpower planning. Furthermore, the unit should have sufficient funds for carrying out surveys related to manpower planning, since without an adequate statistical base, planning becomes a useless exercise. In summary, the unit would be responsible for providing the information required to guide and coordinate Yemen's education system and the various donor's training programs towards removal of educated manpower bottlenecks

without creating surpluses. AID might support the unit by providing the manpower advisors, by training the Yemeni counterparts and by providing the funds necessary to support the unit's activities in data gathering and analysis.

PART III

ALTERNATIVES AND RECOMMENDATIONS FOR
THE DEVELOPMENT TRAINING PROJECT (040)

The current AID Development Training Project 020 will terminate with the close of the 1977 fiscal year. A new training project 040, with similar purposes, has been proposed for FY 1978 to FY 1982. This part of the report considers some of the major options and constraints for the new project and makes recommendations.

A. BACKGROUND

1. The Project Identification Document

A project identification document (PID) was prepared for the new Development Training Project 040 in June 1976.

The PID proposed that the new project 040 would be similar to the old project 020 in that it would continue to train participants for key development-related positions. The training would continue to be both degree and non-degree and located both in the United States and in Arab-speaking third countries. However, the PID did indicate new directions. First, training would only be for the public sector, not the private sector. Training would be concentrated upon a few key ministries and also upon Sana University. Educating Yemeni lecturers from Sana University, the PID argued, would have a wide spread-effect. The new project would place greater emphasis on graduate degree training in the U.S. and undergraduate degree training in Arab-speaking third countries and less emphasis on non-degree training. The PID also raised the possibility of a full time AID Training/Education Officer to manage the project as well as continuation of 2 US English language teachers for YALI. Also, the PID proposed AID assistance in the human resource

area by supporting human resource studies and data collection. Specifically, short-term consultants were proposed to assist with manpower planning and related data gathering for the CPO.

The PID proposed training up to 20 participants in the US in managerial/executive/technical fields annually, 10 fully and 10 partially funded Sana University participants annually, up to 30 new agricultural students for undergraduate training in selected third countries in FY 78 and FY 79, and a number of short-term training programs such as conferences and seminars. The proposed budget was as follows:

Table 39 - AID Financed Inputs
(\$ 000)

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>FY 81</u>	<u>FY 82</u>	<u>TOTALS</u>
Consultancies	50	50	50	—	—	150
Contract Services (English Teachers)	70	70	75	75	75	365
Direct Hire (Training/Education Off.)	60	60	65	65	65	315
Participants (Executive, managerial, technical)	380	380	400	400	400	1,960
Participants, Sana U. (Full funding)	100	100	120	120	120	560
Participants, Sana U. (Partial Funding)	35	35	40	40	40	190
Undergraduate Degree Training in third countries	360*	360*	—	—	—	720
Special Conferences, Seminars	30	30	30	30	30	150
	<u> </u>					
TOTALS	1,085	1,085	780	730	730	4,410

* Assumes full four year funding for 30 undergraduate degrees at \$12,000 a degree.

2. Congressional Presentation, FY 1978

By the time of the Fiscal Year 1978 Congressional Presentation to the Congress, the concept of the Development Training Project 040 had changed in a number of ways. Most important was the increase in size; the CP was proposing a project budget from FY 1978 to FY 1982 of \$15,980,000, whereas the PID had proposed a total budget of only \$4,410,000. The CP proposed training a total of 574 participants whereas the PID had estimated training about 200. Also, the CP appeared to place greater emphasis upon undergraduate degree training in the United States, including completion in the United States of 58 students formerly at AUE whose training was disrupted by in-fighting in Lebanon.

Table 40 - Major Outputs of Project 040

	<u>FY 78</u>	<u>FY 79</u>	<u>FY 80</u>	<u>All Years</u>
	(Cumulative as of end of FY)			
Human resources studies (MM)	12	24	30	56
Participants in training	139	181	253	574
Returned participants	27	58	90	574

Table 41- AID-Financed Inputs
(\$ 000)

	<u>FY 78</u>	<u>All Years</u>
Personnel		
U.S. direct hire Project Manager	60	330
2 PSC English teachers	100	550
Consultants for short term studies	20	100
Trainees	<u>2,615</u>	<u>15,000</u>
TOTAL	2,795	15,980

3. Viewpoints.

Before moving on to alternatives and recommendations for the new training project, it might be useful to outline the views of a few key individuals with an interest or knowledge in the project's outcome.

Recent correspondence between U.S. Senator James Abou.ezk and AID Administrator John Gilligan on the topic of AID's new Development Training Project 040 indicates a desire to increase the size of the project and also to emphasize undergraduate degree training in the U.S. The Senator proposed: "that the Agency divert part of the existing funds for Yemen to scholarship and training programs for Yemeni students in the United States... I do not have in mind a two-week, one month or even six-month stay in the United States, but full term scholarships which will lead to university degrees or the equivalent in training schools." Gilligan's response was that AID's proposed FY 1978 Development Training Project 040 would more than double the level of funding obligated in FY 1977 (from \$1.2 million to \$2.8 million) and that most of this would be for full-term scholarship programs in the United States, provided qualified students were available.

Within the Yemen Government there is also a desire for an expanded participant training project from AID, with more emphasis upon degree programs. Abdel Karim El-Iyriani, Minister of Education and President of Sana University, felt that AID ought to send larger numbers for

training to Arab-speaking third countries. This would enable the project to expand and avoid the bottleneck of limited availability of nominees proficient in English. Also, he felt that use of Arab institutions would also lower cultural adjustment problems and reduce dropouts, improve performance and increase return rates. Others within the Yemen Government disagree with El-Iyriani on this point. For example, Mohammed Mattahar, Vice President of Sana University felt that large numbers of Yemenis were already being trained within the region and that emphasis should shift towards Western-oriented education by increasing scholarships to the US and Western Europe. The most recent technologies and methodologies in many fields, he felt, were only taught in the West. Mohammed Abdul Wohab Al-Ariki, Acting Chairman of the CPO, agreed that AID ought to expand undergraduate scholarships in the United States for Yemenis. He felt that the bottleneck, created by requiring a certain level of English proficiency of participants before leaving the Yemen, could be removed by eliminating the prerequisite (and YALI), and replacing it with intensive English language training in the United States.

Within the AID Mission, Dominic D'Antonic, who has been the officer in charge of the old training project 020 for 2 years, expressed doubts about the feasibility of enlarging the new project 040 to the size suggested in the CP. Close to the everyday problems of implementing the project, he saw major problems in finding sufficiently large numbers of qualified nominees for participation in AID training.

Response of the ministries to AID's offer of training opportunities

has been slow and minimal. If the number of opportunities offered were doubled or tripled, they probably could not be filled by qualified nominations. A major problem, in D'Antonio's view, is the regulation that candidates must score a certain level on an English exam before being "called forward" to the U.S. for further intensive English courses and their training program. Given the increasingly low levels of English knowledge of nominees, they will be required to spend one to two years at YALI in Sana. The majority of the nominees drop out and only one to two dozen have been making "call forward" level each year.

The views of two other men ought to be considered, James Socknat and Clive Sinclair, the authors of the manpower report. Upon analyzing the demand and supply for highly educated manpower in the Yemen, they concluded that a major problem "will be to limit the number of scholarships and students studying abroad to an appropriate level." ^{1/} In discussions, they pointed out that if training went on expanding randomly, educated unemployment was soon likely to result. They considered it important to carefully limit and allocate scholarships to fields according to an up-to-date manpower requirements plan. Furthermore, they suggested that arrangements for employment ought to be made prior to a candidate's departure for training abroad to avoid the possibility of unemployment.

^{1/} Page 2.1

B. OPTIONS AND CONSIDERATIONS

1. Size of Project

The alternatives range from a project of the size suggested in the PID of about 40 participants per year to the size suggested in the ABS of well over 100 participants per year.

In deciding on an appropriate and feasible size, a number of factors should be considered, including the demand for highly educated manpower, the supply of qualified and English-speaking candidates for AID training, competition with other donors for candidates, AID administrative capabilities and political considerations.

According to the manpower report, the supply of university graduates will be relatively large compared to the employment opportunities for university graduates. Thus, their view is that the total number of scholarships available for overseas studies ought to be limited, not expanded. 1/ However, they say nothing about the desirability of a change in composition, such as more Western education versus Eastern bloc or Arab education. If AID does expand university scholarships for Yemenis, the limitations of demand ought to be remembered; fields ought to be carefully decided to fill specific needs and arrangements for employment upon completion of the degree ought to be made beforehand. 2/

1/ The report estimated for 1975-1980 the total demand for manpower with university degrees would be 2000, whereas the supply would be between 3,000 to 7,000.

2/ This has been AID's policy in the past.

According to the manpower report there will be a large manpower shortage of sub-professional and technical occupations requiring several years post secondary training; AID might consider helping to fill this gap of mid-level manpower by expanding its non-degree participant training.

Another question for consideration in determining the size of the AID Development Training Project 040 is the supply of qualified mid-career government employees and of qualified secondary school graduates that would be available for participation in the program. The target group within government that is qualified for further training are those with at least a secondary school education. According to the 1975 survey there were 1243 in government with a secondary school certificate, 256 with some post-secondary education and 690 with a university degree or higher. Experience with the old project 020 reveals that nominations for AID training of qualified mid-career government employees has been limited to about 30-50 per year. Not only are qualified candidates in short supply but competition for these people is severe. Many donors seek qualified "counterparts" for project-related training programs.

In addition to these constraints in getting educationally qualified nominees from the government is the English language problem. There are very few in government who know English and have not already been sent on a training program abroad. Given the present

system of regulations requiring a certain English proficiency prior to leaving the Yemen, more than half of the public sector nominees for AID training never leave. Many nominees, upon learning that it will take their free time studying English at YALI for 1 to 2 years before qualifying become frustrated and drop out.

AID participants need not be limited to mid-career government employees. In fact, under the old project 020, AID sent a number of groups of secondary school graduates directly for undergraduate degree programs in Arab-speaking countries. Here the only supply constraint is the number of secondary school graduates who are eligible for foreign scholarships and the amount of competition for these students from other donor scholarship programs.

Estimates of the number of secondary school graduates who will be available for scholarships abroad for the next few years are as follows: 1/

1977/78	830
1978/79	1170
1979/80	1270
1980/81	1550
1981/82	1830

1/ Assuming 60 percent of all science graduates have grades qualifying them for scholarships abroad and that these graduates have worked the required one year for government to become eligible.

While offers of scholarships from various donors have been abundant in the past and have often gone unfulfilled, scholarships for undergraduate study in the United States or at AUB will be greatly sought after by students and preferred over Arab or Soviet bloc scholarships. There are currently few scholarships to Western institutions and thus real "competition" will be minimal.

The size that the new project 040 can be expected to attain will also depend upon what solution is chosen for the English requirement bottleneck. One option is to depend more heavily upon AID's using educational institutions located within Arab-speaking countries. However, for various reasons AID may wish to emphasize training in United States institutions. Under the current system, one must expect that mid-career public sector nominees will take at least one to two years studying part-time at YALI before they reach "level" qualifying them to be sent to the U.S. Also, one must expect dropouts of at least half of these original nominees. YALI's experience with "unemployed" candidates for undergraduate degree programs has been much better than with public sector, non-degree nominees. They have less responsibilities and more time to study English plus they are more motivated by the promise of a degree. For this type of group, "level" might be reached within one year at YALI.

The CP envisioned having between one to two hundred participants commence training in the first three years of the new project. If the

emphasis is to be upon training in the United States, this will be near impossible given the current system of English training. If the current system is to be maintained, the lag and the dropout rate ought to be considered; YALI will have to be appropriately expanded enrolling at least double the number of participants desired one (or more) year hence. Thus, most of the candidates will only be ready to leave for the United States beginning in the second and third year of the project, rather than at the beginning as envisioned in the ABS. 1/ An alternative is to disband YALI and send students with no English directly to the U.S. for intensive English language training. Under this option, lack of Yemenis proficient in English would no longer be a bottleneck to the size of the project, but other problems would emerge.

Another concern related to the size of the project is AID's capabilities to administer an enlarged project. If the new project 040 is to be much larger than the old project 020, the AID Mission will need a full-time training/education officer to implement the project. Also, either YALI's facilities and teaching staff will have to be enlarged, or alternatively, arrangements with Georgetown University or another institution in the U.S. (or AUB) will have to be made for longer-term intensive English language training of Yemenis. 2/

1/ This raises the question of whether a five-year project is long enough if the processing of participants may take 1-2 years of language training and then up to 4 years for a degree program.

2/ ALIGU would have no trouble absorbing as many as fifty Yemeni students per year, but much more would seriously change the international nature of the Institute.

A final consideration in determining the appropriate size of the new participant training project is political. The Yemenis appear to desire more scholarships to the United States. Increased exposure to our institutions and way of life may have an important impact on the cultural, economic and political outlook of future YARG leaders.

2. Type of Training.

The options are continuing to emphasize non-degree, mid-career training programs or shifting towards more degree programs either at the undergraduate or the graduate level.

Advantages to continuing with the non-degree, mid-career training for the public sector include that this type of training has proven to be successful in the past. The participants, with established careers and families, have had high rates of return to the Yemen Government after training and have utilized their training in their jobs. If young students are sent to the United States for long-term undergraduate work, they might have lower return rates.^{1/}

Disadvantages with this type of training include the limited supply of qualified nominees from the ministries. The English language requirement is an additional constraint. Many nominees, doubtful about the personal value of non-degree training in promoting their careers, are reluctant to devote their free time for more than a year to learning English.

^{1/} This is speculation; there are no data to support this argument.

There are a number of advantages to shifting the AID training project towards degrees. First, this would enable an expansion of the total size of the project, since recent graduates from secondary schools could be selected as well as mid-career government personnel. Furthermore, the nominees would consider degree training much more rewarding career-wise and would be more likely to seek out such opportunities. Such candidates would be more likely to be motivated to study English diligently at YALI, and if they're not yet employed they will have more time for English.

Other considerations are the desire of the officials of the Yemen Government for a larger AID training project which emphasizes degree training.

On the negative side, the manpower report concluded that the demand for occupations requiring university degrees were very limited, especially in the liberal arts fields. To the extent that maths and science based degrees are in demand and can best be taught in Western Universities, an AID degree scholarship program would be beneficial. However, even in these fields the demand is relatively small according to the manpower report. The report emphasizes that the greatest shortages in trained manpower will be in sub-professional and technical occupations requiring several years post-secondary education. If AID desires to help fill in these gaps where in-country training is inadequate, the non-degree programs should be expanded.

Another problem with expanding the number of degree appointments under project 040 is that it may simply steal candidates from the AID program which has already been having difficulty finding enough suitable nominees.

3. Place of Training.

The major options are training in the United States and in Arab-speaking third countries. In the old O20 project, the non-degree, short-term training was done mostly in the United States. Undergraduate training was done mostly in Arab institutions (in Egypt), except for a few undergraduates from AUB who transferred to US institutions due to the fighting in Lebanon. A few mid-career employees were also obtaining a Masters degree as part of their U.S. training.

Advantages to training in the United States include the exposure to the latest Western technologies and methodologies and also an introduction to new, modern ways of approaching problems. These advantages are probably the greatest at the degree levels and for future high-level decision-makers. Disadvantages to US study include the prerequisite need to learn English. This disadvantage is not so severe for degree candidates, since they will be more motivated to learn English and also will be using English for several years while studying. On the other hand, teaching English for a year or more to someone who will only be in a short-term training course is inefficient.

Another disadvantage to training in the United States is the greater possibility of cultural adjustment problems. Particularly young students coming from this very traditional society may have problems adjusting to the new lifestyle, language, coursework and academic pressures. A good policy would be only to accept those secondary school graduates at the very top of their class and to start with a fairly small pilot group.

The advantages to training in Arab-speaking third countries is obviously less adjustment problems due to the similarities in language and culture. Such training is also less expensive. A third advantage is that generally English is not required. The basic disadvantage is not enough exposure to new technologies, teaching methodologies and different, modern life styles. In general, for less brilliant students and for non-degree short-term programs, training in Arab institutions would be preferable if the required specializations/skills are taught. For filling the large manpower shortages categorized in the manpower report as "sub-professional and technical occupations" requiring several years post-secondary training," use of Arab country institutions were possible is suggested.

4. Fields of Training.

Options include greater AID control over choice of fields or continued reliance upon the CPO for decisions regarding fields. In the past, the CPO chose fields for study in an ad hoc manner rather than according to any plan. However, it probably would be politically unwise to attempt now to take back this authority. AID will have even less ability than the government to decide manpower requirements and to coordinate with all other donor training programs. The function of selecting fields should properly be within the CPO. AID might strengthen the government's capability by providing preferably full-time advisors for the development of a manpower planning unit within the CPO. The unit would be responsible for planning manpower requirements and directing the allocation of

scholarships and training opportunities from the various donors according to these needs. 1/

The current source of manpower demand and supply projections is based on data that is too incomplete and out-of-date to be very reliable. However, since the manpower report is the only source now available for guiding decisions regarding fields of training, its conclusions are reprinted in table 42. According to the table, the major public sector manpower shortages requiring a university degree will be in the fields of architecture, irrigation engineering, agricultural engineering, statistics, teacher training and technical teaching. There will also be a relatively large shortage of surveyors, draftsmen, civil engineers, engineering technicians, nurses, secondary school teachers and other sub-professional and technical occupations requiring several years of post-secondary education.

AID might wish to limit the fields they will support by developing 'flexible guidelines' that direct training towards sectors of greatest AID concern and towards occupations with high likelihood for spread effects to the poor.

A recent regulation by the government will restrict choice of fields for undergraduate scholarships abroad to medicine, engineering and agriculture. Depending upon how strictly or broadly these "fields" are interpreted, this regulation may be an unwise restriction.

5. Priority Ministries and Institutions.

Options include greater emphasis upon a few selected ministries, greater dispersion of training opportunities among the ministries

1/ Several Yemeni counterparts ought to be trained in manpower planning to eventually run the unit when the advisors leave.

TABLE 42 - EMPLOYMENT DEMAND BY OCCUPATION AND SUPPLY BY OCCUPATIONAL CATEGORY, 1975 - 1980

	Additional Jobs 1975-1980 Private Sector	Additional Jobs 1975-1980 Public Sector	Total Additional Job Opportunities 1975-1980	Non-Yemenis in 1975	Yemeni Heritage Due to Death & Retirement 1975-1980	Total Net Job Opportunity 1975-1980	Supply (SEP 1) 1975-1980	Shortage(-) or Surplus (+)
A.F.C.O. ALL OCCUPATIONS	15,726	12,952	28,678	266	2,735	31,679	299,416	+267,739
A-1 PROFESSIONAL OCCUPATIONS Prof- umably Requiring A Science-Based University Degree	105	1,045	1,150	145	22	1,317	1,373	+56
0-11 Chemists	-	-	-	1	-	1	90	+89
0-13.40 Meteorological Scientists	-	10	10	-	-	10	-	-10
0-21 Architects & Town Planners	-	27	27	1	1	29	-	-29
0-22 Civil Engineers	-	11	11	1	-	12	112	+100
0-22.55 Irrigation Engineers	-	40	40	-	-	40	-	-40
0-23 Electrical & Electronics Engineers	26	20	46	2	1	49	44	-5
0-24 Mechanical Engineers	17	16	33	3	2	38	38	-
0-25 Chemical Engineers	2	-	2	-	-	2	3	+1
0-28 Industrial Engineers	2	-	2	-	-	2	-	-2
0-29 Engineers N.E.C.	10	8	18	2	1	21	0	-13
0-29.3 Agricultural Engineers	-	38	38	-	-	38	-	-38
0-51.00 Biologists, Zoologists & Related Scientists	18	-	18	22	1	41	-	-23
0-51.10 Biologists	-	1	-	-	-	1	-	-1
0-51.20 Botanists	-	2	2	-	-	2	-	-2
0-52.50 Animal Scientists	-	11	11	-	-	11	-	-11
0-53.00 Agronomists & Related Scientists	1	-	1	1	-	2	-	-2
0-53.20 Agronomists	-	81	81	1	-	81	207	+67
0-53.30 Horticulturalists	-	2	2	-	-	2	-	-2
0-53.40 Forestry Officers	-	19	19	-	-	19	-	-19
0-53.50 Soil Scientists	-	39	39	-	-	39	-	-39
0-53.60 Farming Advisor	-	9	9	-	-	9	-	-9

1,237

+3

Table 42 continued

(F.C.O. [-] Occupations Contd.....	Additional Jobs 1975-1980 Private Sector	Additional Jobs 1975-1980 Public Sector	Total Additional Job Opportunities 1975-1980	Non-Yemenis in 1975	Yemeni Waitego Due to Death & Retirement 1975-1980	Total Net Job Opportunities 1975-1980	Supply(FET 1) 1975+1980	Shortage(-) or Surplus (+)
0-61.00 Medical Doctors	15	120	135	98	11	244	539	+295
0-63.00 Dentists	10	6	16	6	1	23	10	-13
0-65.00 Veterinarians	-	1	1	-	-	1	1	-1
0-67.00 Pharmacists	-	17	17	5	1	23	34	+11
0-81 Statisticians	-	48	48	-	-	48	-	-48
0-83 Systems Analysts	3	-	3	2	-	5	-	-5
0-90 Economists	-	62	62	1	-	63	230	+167
1-32.10 Teaching Training & Technical Teachers	1	457	458	-	3	461	-	-461

J.S.C.O. Table 42 Cont.		Additional Jobs 1975-1980 Private Sector	Additional Jobs 1979-1980 Public Sector	Total Additional Job Opportunities 1975-1980	Non-Yemenis in 1975	Yemeni Waiver Due to Death & Retirement 1975-1980	Total Net Job Opportunities 1975-1980	Supply (FTT 1) 1975-1980	Shortage(-) or Surplus (+)
A-2 PROFESSIONAL OCCUPATIONS Pres- umably Requiring An Arts-Based University Degree		93	404	497	25	80	602	5,364	+4,762
1-10	Accountants	34	122	156	6	7	169		
1-22	Judges	-	-	-	-	11	11		
1-29	Religious & Legal Men	-	19	19	-	-	19		
1-59	Authors & Journalists	-	-	-	-	1	1		
1-91	Librarians, Archivists, Curators	1	-	1	1	1	3		
1-92	Sociologists, Anthro- pologists & Related Scientists	-	47	47	-	-	47		
1-94	Personnel & Occupa- tional Specialists	-	1	1	1	-	2		
1-95	Philologists, Trans- lators & Interpreters	-	9	9	-	-	9		
1-99	Other Professional Technical & Related Workers	2	-	2	1	-	3		
2-01	Legislative Officials	1	23	24	-	-	24		
2-02	Government Administra- tors	5	174	179	-	54	233		
2-11	General Managers	42	7	49	13	5	67		
2-12	Production Managers (except Farm)	8	-	8	3	1	12		
2-19	Managers H.E.O.	-	2	2	-	-	2		

1,239

Table 42 continued

I.S.O.O.	Additional Jobs 1975-1980 Private Sector	Additional Jobs 1975-1980 Public Sector	Total Additional Job Opportunities 1975-1980	Non-Yemenis in 1975	Yemeni Wastage Due to Death & Retirement 1975-1980	Total Net Job Opportunities 1975-1980	Supply(FET 1) 1975-1980	Shortage(-) or Surplus(+)
B-1 HIGH LEVEL TECHNICIAN OCCUPA- TIONS Presumably Requiring Three to Five Years Post- Secondary Science/ Maths.-Based Educa- tion	TOTAL	10	31	41	7	53	9	-44
0-31	Surveyors	6	16	22	3	3	28	
0-32	Draughtsman	1	15	16	1	1	18	
0-41	Pilots & Flight Engineers	-	-	-	-	1	1	
0-42	Ships' Deck Officers and Pilots	1	-	1	2	-	3	
1-41	Ministers of Religion	2	-	2	1	-	3	

Table 42 continued
I.C.O.

	Additional Jobs 1975-1980 Private Sector	Additional Jobs 1975-1980 Public Sector	Total Additional Job Opportunities 1975-1980	Non-Yomoni in 1975	Yomoni Waitego Due to Death & Retirement 1975-1980	Total Net Job Opportunities 1975-1980	Supply (FLT 1) 1975-1980	Shortage(-) or Surplus (+)
D-2 SUB-PROFESSIONAL & TECHNICIAN OCCUPA- TIONS Presumably Requiring 1-3 Years Post-Secondary Science/ Maths-Based Education	277	345	622	22	58	702	122	-580
0-14 Physical Science Technicians	7	-	7	-	-	7		
0-33 Civil Engineering Technicians	5	50	55	1	-	56		
0-34 Electrical & Electronics Engineering Technicians	9	9	18	2	4	24		
0-35 Mechanical Engineering Technicians	12	5	17	1	1	19		
0-36 Chemical Engineering Technicians	5	-	5	-	-	5		
0-39 Engineering Technicians H.E.C.	25	60	85	13	0	106		
0-54 Life Science Technician	19	8	27	-	3	30		
0-62 Medical Assistants	3	10	13	1	17	31		
0-63 Dental Assistant	-	-	-	-	1	1		
0-66 Veterinary Assistant	-	26	26	-	-	26		
0-68 Pharmaceutical Assists.	4	-	4	-	1	5		
0-69 Dieticians & Public Health Nutritionists	-	4	4	-	-	4		
0-71 Professional Nurses	15	117	132	2	1	145		
0-72 Nursing Personnel N.E.C.	26	-	26	-	3	29		
0-73 Professional Midwives	4	-	4	1	1	6		

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Table 42 continued

I.F.C.O. Contd.....	B-2 Occupations	Additional Jobs 1975-1980 Private Sector	Additional Jobs 1975-1980 Public Sector	Total Additional Job Opportunities 1975-1980	Non-Yemenis in 1975	Yemeni Wastage Due to Death & Retirement 1975-1980	Total Not Job Opportunities 1975-1980	Supply (NET 1) 1975-1980	Shortage(-) or Surplus (+)
0-76	Physiotherapists & Occupational Therapists	7	-	7	-	1	8		
0-77	Medical X-Ray Technicians	9	7	16	-	1	17		
0-84	Statistical & Mathematical Technicians	-	49	49	-	-	49		
3-59	Transport & Communications Supervisors	106	-	106	1	5	112		
3-60	Transport Conductors	19	-	19	-	1	20		
8-61	Broadcasting Station Operators	2	-	2	-	-	2		

Table 42 continued

I.S.C.O.	Additional Jobs 1975-1980 Private Sector	Additional Jobs 1975-1980 Public Sector	Total Additional Job Opportunities 1975-1980	Non-Yemenis in 1975	Yemeni Wastage Due to Death & Retirement 1975-1980	Total Net Job Opportunities 1975-1980	Supply (ET 1) 1975-1980	Shortage(-) or Surplus (+)
B-1 OTHER SUB-PRO- FESSIONAL AND TECH- NICIAN OCCUPATIONS Presumably Requiring 1-3 Years Post- Secondary Education								
TOTAL	426	1,575	2,001	1	56	2,050	358	-1,700
1-32.20 Secondary School Teachers	-	1,575	1,575	-	16	1,591		
1-79 Performing Artists	-	-	-	-	1	1		
5-00 Managers (Catering and Lodging Services)	426	-	426	1	39	466		

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or greater emphasis upon training for private sector needs.

Although the original intent of the project 020 was also to train manpower for the private sector, in practice this was not done. For the new project, emphasis upon training for the private sector is probably not desirable. The manpower report estimated a very small demand for highly educated manpower in the private sector.^{1/} Furthermore, there is little to guarantee that those trained would work in the Yemen private sector even if jobs were available. Higher salaries abroad would probably attract many away. In the public sector, strict regulation of a training law requiring mandatory service in return for training enhances the likelihood that training will benefit the Yemen.

AID might consider concentrating upon ministries that have the most direct impact upon development and welfare. Since AID's directives include helping the poor majority by reducing mortality and fertility, by spreading education and increasing rural productivity, the logical choices would be to emphasize the ministries of health, education and agriculture. ^{2/} Because the Central Planning Organization centralizes

^{1/} A total demand of only 200 university educated persons during 1975-1980.

^{2/} These ministries are extremely understaffed regarding qualified people. Despite the obviously great need for upgrading, the response of these ministries to training opportunities has been poor. In the past AID has circumvented the problem in the case of the Ministry of Agriculture by sending groups of secondary graduates for undergraduate training in Arab universities with the agreement that they work for the ministry after completion of the degree. This same approach could be used for other priority ministries as well.

and directs all the other ministries, it should also be a major target for assistance. Institutions with large "spread effects" might also be emphasized. Examples would be training paramedics for the Ministry of Health, extension workers for the Ministry of Agriculture, community program specialists for the TV and radio stations, and teacher-trainers for Sana University's education faculty.

One institution which AID has been interested in supporting more is Sana University. Training more Yemenis for future positions as lecturers will help fulfill their goal of reducing foreign faculty and control. Supporting Sana University will also have a wider "spread effect" than most ministries since the returned participant will become a formal lecturer and pass on much of his or her knowledge gained during training. This "spread effect" will be especially great in the case of supporting the education faculty which teaches teachers/^{for}preparatory and secondary levels. Building up of Sana University's faculty ought to be done carefully, keeping in mind those fields where the demand for university graduates is large enough that in-country production is efficient. Obviously, in the many fields where only a handful of graduates will be required, it is more efficient to continue educating them abroad rather than to create a Yemeni faculty.

6. Language Training

One option is to continue conducting the English language training as in the past, with the nominees attending YALI part-time for however long it takes them to achieve "call forward" level and

then attending ALIGU in Washington for up to four months of intensive language courses.

Advantages of continuing this approach as opposed to sending Yemenis with no English directly to ALIGU are as follows. First, YALI serves a selection function of weeding out those who are incapable of learning English, not academically inclined or are not motivated. YALI also serves to prepare participants for the U.S. culture, mainly by introducing them to the language. Given the large cultural differences between the Yemen and the U.S., this may help reduce some of the adjustment problems likely to be encountered upon arrival. Finally, YALI costs less. Under the current system, the average cost per successful student has been about \$6,300, including about \$2,500 for YALI plus another \$3,800 for four months at ALIGU. If a student were sent directly to ALIGU with no English it would take from 9 months to a year to bring him/her to a level sufficient for academic work, at a cost of about \$8,500 to \$11,500 per student.

However, this current system also has serious drawbacks. YALI appears to be "selecting out" too many nominees and sometimes for the wrong reasons. Some have been unable to attend YALI because their jobs are demanding and have schedules that conflict with YALI's hours. Also, YALI has not been geared to teaching English to beginners and the selection process tended to favor those with prior knowledge of English. The high dropout rate (over 50%) and long time required to bring a beginner to "call forward" level (1 to 2 years) will seriously constrain the feasible size of the training project, especially in the

next few years. If the emphasis of the new project shifts towards degree programs, some of these problems will be reduced by improving the average academic qualifications and motivations of the participants.

A second option is to discontinue YALI and to send Yemeni students with no English background directly to ALIGU in Washington, D. C. or elsewhere for a year of intensive language training.

Advantages of this approach include a reduction in the number of nominees lost through dropouts, thus eliminating a major bottleneck on the project's feasible size. It is probable that the students, with full-time English courses and surrounded by the American society, will learn English at a much faster pace.

Disadvantages include that there would now be practically no AID-controlled selection process before a participant leaves the Yemen. This may result in unnecessary grief and waste for those who were not qualified, who could not learn English or who could not adjust to the U.S. lifestyle. Though there will no doubt be less, the cost of dropouts becomes much higher once the candidate is sent to the U.S. Adjustment problems are likely to be more severe without any prior introduction to the language and culture. Finally, as mentioned earlier, this option costs somewhat more per successful student.

A third option would involve changing the nature of YALI courses to short-term, intensive courses, after which those "selected" will go on to ALIGU. For example, there might be an intensive three month course

at YALI followed by 6 to 9 months of intensive study at ALIGU. Selection would be based not so much on reaching a "call forward" level as showing an ability to learn (i.e., improve one's score) and a motivation to attend classes. To the extent possible, the selection should include an evaluation of academic qualifications as well as English. The program might also place more emphasis upon introducing American culture in order to reduce adjustment problems later. Those selected at the end of the three months would then proceed on to ALIGU in Washington, D. C. ^{1/}

Advantages to this approach include keeping a selection process and even broadening it to include more appropriate criteria. Perhaps fewer good candidates will drop out for the wrong reasons. Such a YALI program will not experience as many dropouts and not involve one to two years time to process a student; thus, it would not be such a constraint to future project size. Finally, it will keep down costs over the second option and help avoid culture shock.

The only major disadvantage of this approach is that YARG may not agree to release their nominees for full-time attendance at YALI. However, to the extent that the new project will emphasize secondary school graduates who will not yet have job obligations, this will be no problem. Also, if the government knows that the YALI intensive course will be for a definite, short time period rather than the vague amount of time it takes to reach "call forward" level, they may be more willing to release their nominees from work obligations.

^{1/} ALIGU has no problems accepting students below official call forward levels. However, since this is contrary to Handbook 10 regulations, SER/IT approval will be required.

C. RECOMMENDATIONS.

1. Size and Composition of Training Project.

Based on the consideration of options and constraints described above, the following suggestions are made regarding the numbers and composition of Yemeni participants for the AID Development Training Project 040:

(a) a program of about 20 undergraduate scholarships to U.S. universities or to American University of Beirut per year.^{1/} There should be no problem getting the best of the secondary school graduates and only those with final scores of 85 + should be accepted.

(b) a program of about 20 undergraduate scholarships to Arab-speaking institutions in third countries per year. These groups could be used to support institutional development of specific key ministries, as AID has done in the past for the Ministry of Agriculture. This program might accept secondary school graduates with scores of 80 +.

(c) a continuation of the mid-career training program for public sector employees. This program might best be divided into three distinct groups with separate objectives:

(1) training of about 20 mid and high-level government officials per year who will be in policy-making positions. This type of training should be in the U.S. and include a masters degree where considered desirable.

(2) training of about 10 Yemenis per year for positions on the faculty of Sana University. This

^{1/} SER/IT has suggested that all undergraduates in this category spend their first year at AUB after which they might transfer to U.S. universities. See cable STATE 164011.

training should be in the U.S. and degree oriented at the M.A. and Ph.D. levels.

(3) training annually 30 mid-level, public sector employees in sub-professional and technical skills that cannot be accomplished in local training institutions. The training will probably be fairly short-term and non-degree. Efforts should be made to use Arab-speaking third-country institutions where possible.

2. Selection, Monitoring and Placement Process.

Proper choice of fields, selection of nominees for training, placement and follow-up to ensure utilization of training are functions that logically should be done by the YARG. However, the Central Planning Organization's and the ministries' current capabilities in these areas leaves much to be desired. It is suggested that AID help support the establishment of a manpower planning unit within the CPO that will direct and coordinate donor training programs according to manpower requirements and that will carry out follow-up and evaluation studies. Once central records are kept of which participants are returning and which are not, centralized enforcement of mandatory service and placement becomes a possibility. Further recommendations on AID's role in supporting a manpower planning unit are given below under "Staff and Consultant Requirements."

AID has had some say in selection in the past through the English language requirement, which weeded out some unqualified or uninterested

nominees. However, as already discussed this "selection process" had some negative features of loosing too many nominees and of making the only criteria that of language proficiency. Option 3 on page 158-159 is recommended because it will maintain the selection function but reduce the negative aspects.

A special selection criteria which AID may wish to see enforced is that of nominating more women. This might be accomplished by simply specifying that a certain percentage of the opportunities will be available for women only. This percentage should be a feasible one, keeping in mind availability: 7 percent of secondary school students are female and 8 percent of government employees are female. Perhaps a goal of between 10 to 20 percent of total AID offers set aside for women would be reasonable.

To continue to ensure utilization of training, AID should strengthen the practice of not sending participants for training without prior agreement with the YARG and with the participant about the position he/she will occupy upon return. Similar procedures ought to be followed with undergraduate scholarship participants. Such agreements, however, cannot be enforced without a better system of follow-up of returned participants within the YARG.

3. Language Training.

If the size and composition of the training project suggested above is accepted, as many as fifty participants per year will require

English language training before beginning their academic studies in the United States. ^{1/} This will not be much larger than the classes YALI has had to deal with in the past. However, there will be a difference in composition, since nearly all will be degree oriented. This should make a positive difference in attendance and performance of the students, who probably will be of a higher academic level and also will be more motivated to achieve. On the other hand, future YALI students will probably come with less background in English than in the past, and the courses will have to be more oriented to the beginner's level.

For AID scholarship candidates who have recently graduated from secondary school and who have not yet started time-consuming jobs, an intensive course at YALI should be arranged. For those that are high-level, mid-career public servants, YALI will have to be more flexible in arranging the course timing to meet the Yemenis' needs. One cannot ask the government to release these key people from their jobs for an indefinite period. From discussions with Yemeni public officials, a course from 4 to 7 P.M. or even later appears to be most suitable from their viewpoint. If a sufficient number of these mid-career people can be released from their duties for a short-term (2-3 months), intensive course at YALI, this would be desirable in speeding up the process.

^{1/} That is, 50 successful candidates per year are desired; more nominees will have to be enrolled at YALI to account for some dropouts.

In general, option 3 discussed on pages 158-159 is recommended.

4. Staff and Consultant Requirements.

It is suggested that the AID Mission hire a full-time education/training officer to implement the Development Training Project 040. He/she should be somewhat aggressive in finding and choosing good nominees, through close coordination with the CPO and with the ministries. Another duty should involve evaluating institutions in Arab countries appropriate for AID training programs.

It is suggested that AID continue to hire three English teachers for YALI.

Furthermore, it is recommended that AID fund full-time advisors and/or short-term consultants to the CPO to help establish a Manpower Planning Unit that will be responsible for:

(1) directing data collection and studies relevant to manpower planning, especially surveys of manpower requirements in the Yemen.

(2) making projections of manpower requirements by education level, field and sector.

(3) coordinating with the ministries regarding their manpower requirements and training needs. Special coordination will be necessary with the Planning and the Scholarships sections of the Ministry of Education.

(4) streamlining the CPO's system of selection, monitoring and placement of participants of foreign programs. The Unit should assure that implementation and coordination of donor training opportunities is based upon the projected manpower requirements. A modern, centralized filing system should be kept on all participants in all training and scholarship programs abroad.

(5) implementing evaluation and follow-up procedures for training and scholarship programs abroad, including surveys and analysis of dropouts, return rates and utilization of training of the various donor programs.

Though foreign advisors will be essential in the short-term for establishing the unit and streamlining its functions, the long-term success will be dependent upon Yemeni staff. The advisors will require qualified counterparts whom they can train and retain. It is essential that the YARG treat the unit as a priority and provide adequate salaries and incentives to attract good staff. AID might contribute by providing masters degree training in manpower planning to a few Yemenis who will work in the unit.

Where the Manpower Planning Unit will fit into the CPO's organizational structure will have to be negotiated with the government. Perhaps it should be in the Department of Planning or

in the Department of Loans and Technical Assistance, or maybe a separate Department. The current Scholarship Office should be part of the Unit.

5. Funding of Surveys and Studies in Manpower Planning.

In addition to providing consultants and training participants for the Manpower Planning Unit, AID might provide financial support to the Unit to help in their data collection and research efforts.

D. OPTIONS FOR AID REINFORCEMENT OF IN-YEMEN TRAINING

Due to the linguistic, motivational and other constraints facing non-degree training on a significant scale in English-speaking countries, it is worthwhile to give serious consideration to areas where AID could help develop in-country training capacity in Yemen as a longer term strategy. This would presumably focus on training people for developmental roles that would assist the rural poor. Time and other responsibilities during two weeks in Yemen did not allow anything more than a preliminary and cursory examination of this issue. This task merits a special field study of options for such assistance. In the interim, the following notes are offered as a start.

1. The Range of Existing Training Programs

Of the five colleges at the University of Sana'a (Arts, Science, Commerce, Law and Education), it is the training of secondary school teachers represented by the Faculty of Education where the University is most directly involved in preparing personnel that may have some contact with the non-urban sector.

At the Ministry of Education itself, the only training institutions per se are the Primary Teacher Training Institutes. Primary teachers are quantitatively the largest group with some modern qualities and a direct contact with the village population. In addition to

teaching children, they sometimes also give adult literacy courses. While at present there are no formal training programs in Yemen for teaching personnel in the Ministry's vocational training centers, adult literacy courses or the District Training Centers of the Education Project, these programs are directly involved with poorer sectors of the population.

Paraprofessional personnel are trained at the National Institute for Public Administration (NIPA), for middle level administrative and clerical roles, and at the Health Manpower Institute, for health program roles.

In the area of Agriculture, the Extension Training Center at Taiz prepared personnel for roles in nonformal agricultural education. Other than this, programs in vocational or technical education, such as the Chinese-supported Technical School and the vocational training programs of the Ministries of Education, Public Works and Agriculture, apparently do not have formal training.

If there are formal personnel training programs in the public sector other than these, they escaped our attention.

2. Comments on Selected Options

Interviews in the field permit some preliminary comments on the University and nonformal education as possible areas for training assistance.

The University, founded in 1971, is almost completely funded by Kuwait and is largely Egyptian staffed. It currently has a little over 3,000 students in five Colleges. About 10% of the students are female and 25% are part-time. Over one-third of the students are in the College of Commerce, taught by 8 professors; almost another third are in the College of Education. ^{1/} The President and Vice-President are Yemenis; and while 22 of the about 100 faculty members have been Yemenis, most of these are teaching assistants waiting to go abroad for Masters degrees. Class attendance is highly sporadic, the curriculum unadapted to Yemen, and the teaching is theoretically oriented. Administrative procedures and supports are rudimentary.

In the College of Education the students, unlike others, are subsidized to the tune of YR 275-300/year. They do most of their work in subject fields in other Colleges; in their last two years they do half of their studies in education per se and do two weeks per year in practice teaching. For nearly 1000 students there are 2 full-time professors, one of whom teaches educational philosophy and methods, and the other does tests, measurements and educational psychology.

Areas suggested by the President for AID assistance include: a visiting professor of educational psychology to develop laboratory techniques for teacher training; a visiting lecturer for 1-2 months

^{1/} Almost all of last year's 100 graduates were in Arts and Law.

who, with an interpreter, could demonstrate teaching techniques and methods; or someone to help faculty with workshops for in-service training.

Outside of Education, there were requests for professional help with the teaching of English at the University (or at NIPA). Also, at the initiative of a Yemeni sociologist and others, there is a plan to set up a research unit in the University. If this occurs, any AID help with having faculty and students do field-based research on planning needs (perhaps arranged through the CPO) would bring university people into contact with rural realities and provide an innovative link of theoretical university work with applied development needs of the country.

Both at the College of Education and in the Primary Teacher Training Institutes there is a poverty of relating educational methods to practice, let alone dealing with less sterile methods or with methods of adult education to support the roles some are later to play. Whether such programs are in condition to be able to absorb such help would require more careful examination.

In the area of nonformal education, these activities at the Ministry of Education are headed by the Literacy and Nonformal Education Department. In addition to the Director of the Department there is an Egyptian Unesco specialist (with many years experience at ASFEC in Egypt), a Yemeni assistant and an Egyptian inspector for the adult literacy program. Two programs may be noted.

(a) Adult Literacy Program. Evening courses are taught part-time by primary and secondary school teachers, who in effect use the same methods and materials they employ during the day, with younger students, with adults who study for the primary school certificate. This amounts to a second-chance primary school program.

(b) District Training Centers. Under the first Education Project, funded by the World Bank, centers were established in three regional communities (Kaida, Bajil, and Amran). Under the second Project an additional center has been established (Zabid), and three more are scheduled (Saada, Hajja, and al-Baida). In theory each Center is to serve a surrounding network of communities, and is to have a varied staff. The staff is to include: a Director, a Deputy-Director, and personnel for agricultural extension (to organize and develop courses), vocational training (to relate training to local industries or rural construction), female education, general lifelong education, and community organization (to help with committee organization, civic courses, cooperatives, etc.)

In practice there are, to date, only the Directors and Deputy-Directors in each of the four established Centers. These are all university graduates, and several have received short-term training at AFSEC in Egypt. Along with community volunteers, they

are operating without buildings and have been limited to simple activities in three areas. These are: (1) Adult literacy; (2) female education in home economics, nutrition and child care; and (3) agricultural courses with the help of FAO specialists.

This program, which has expatriate advisors (Egyptians and Syrians) in the DTC's, is trying to get outside help in rounding out the staff and developing the program. In regard to staffing, they hope to get cadres with some preparatory or secondary education, or people from the Primary Teacher Training Institutes, Health Manpower Institute or Agriculture Extension Training Center of FAO. Rather than depending on teachers, they eventually want to develop training modules around specific tasks, train model illiterate farmers, and encourage them to train others. This oral medium would not require literacy.

It was suggested that AID could help in several ways. For instance, a person for training in planning/evaluation and community organization; help with the development of educational aids, materials, games, etc. for use in the DTC programs; or help in developing a bank of short training modules for specific problems (modules for poultry raising and vegetable cultivation have already been developed).

Again, further exploration is clearly required before assessing the feasibility of training assistance in this program.

3. General Recommendations

(1) In selecting an area where AID assistance can be effective in developing an in-country training capacity, thought should be given to those pre-conditions that should be present if the effort is to be productive. For instance, any or all of the following criteria might be considered:

(a) the foundations of a training activity should be underway (e.g., some resources, personnel, administrative support system);

(b) training should be for personnel with a prospect for benefitting the poor in a development area;

(c) there should be opportunities and reasonable incentives for trainees to practice what they learn;

(d) the training field or skills should be suitable for what AID/US can reasonably expect to be able to offer;

(e) training assistance is not being adequately covered by other donors.

(2) There should be a specific consultancy to study the options for training assistance, and make recommendations.

(3) The cases discussed above would seem to merit further consideration. In addition, new areas such as training for educational programming on the radio (and perhaps TV, though this may be less feasible due to demands of cost and level of expertise) should be assessed.

APPENDICES

November 8, 1976

Development Training Project II for the
Yemen Arab Republic
(Project 020)

Scope of Work

I. Introduction:

The objective of the development training study is to provide information on which the current participant training program can be evaluated and to provide a basis on which a second project can be structured so as to effectively respond to training needs in the Yemen Arab Republic.

The study is designed to cover 3 basic aspects: data collection, evaluation and analysis, and policy recommendations. The contractor is expected to contribute to the development of a Project Review Paper (PRP) and a Project Paper (PP) utilizing the results of the proposed study.

The contractor shall describe in some detail the operations of the ongoing Development Training Program with respect to the number of trainees, the process of trainee selection, and the extent to which training has contributed to trainees placement and skill improvement.

The contractor shall also evaluate the performance of the ongoing program on the basis of results to date. An assessment is required of manpower needs and training opportunities in the short and intermediate term. The contractor will meet these requirements by assessing the adequacy of current manpower projections. To the extent necessary, and depending on the availability of data, the contractor is expected to develop additional projections relating to other aspects of the scope of work.

The contractor will evaluate current education programming as it relates to addressing the training needs in the YAR. The UNESCO/IBRD education sector projects should be assessed in order to determine how effectively they will satisfy Yemeni requirements at all educational levels.

The contractor will determine to what extent lower and middle level training is being overlooked, and how these levels may be integrated into any new program. A determination is also required of the feasibility of integrating public sector training and graduate degree training for the faculty of Sana University within the proposed program, as opposed to limiting training to the public sector.

On the basis of the above data collection efforts and evaluation and analysis, the contractor will recommend alternative strategies on which a development training project could be based.

The contractor is expected to work closely with USAID Mission and YARG personnel in conducting this study. A field investigation phase of the study is needed and should require about two man-months.

II. Data Collection:

In collecting base line data the contractor shall identify the number of trainees, their choice of fields, educational background, English language proficiency, place of study, job placement upon return, current duties, and other employment characteristics which may be relevant in profiling those trained under the current program. Information should also be developed to show the types of contractual conditions which govern returnees employment including wage and benefit structure, duration of mandatory government service, etc.

The contractor shall review available data sources relating to manpower and training requirements, and assess estimates of current and future needs in the light of recent changes. In generating information on manpower needs and training requirements, the contractor shall distinguish between the public and private sector. Public sector needs should be identified, to the extent possible, within the development program of the central government.

III. Evaluation and Analysis:

The contractor shall evaluate the current development training program and assess its effectiveness in contributing to the overall improvement of manpower development in the YAR. Detailed examination of skills should be undertaken. Factors which impede the matching of qualifications with job placement should be identified. The contractor shall also identify those factors which are likely to encourage returnees to leave public service either for employment in the private sector or to emigrate. Such factors should include wage differentials, and other terms of employment. The contractor is expected to make recommendations which would avoid the loss of trainees to the YARG.

The contractor shall evaluate the impact of multilateral and bilateral educational development assistance and assess the extent to which these programs will address the manpower development needs of the YAR. At the same time, contractor shall determine the impact of competition for trainees between donors.

The contractor shall assess the criteria used by the Ministry of Development for selecting candidates for training and make recommendations, if necessary, for modifications to current procedures. Contractor shall also determine the extent that coordination between government departments takes place in manpower development programming. To the extent that coordination needs to be improved, contractor shall recommend ways that this can be accomplished.

In evaluating the overall training program to date, contractor shall determine if lower and middle level vocational skills are being overlooked and why. Some determination should be made of the possibilities of integrating lower and middle level skills into the overall USAID training program.

The contractor shall determine the extent to which in-country training is both practical and efficient. In this regard, contractor shall examine the feasibility of expanding the overall training program to include assistance to Sana University. Specifically, careful consideration should be given to integrating appropriate undergraduate training into the new program. Graduate training for Sana University faculty should also be considered as part of the overall AID program.

In assessing the potential for in-country training, the contractor shall consider alternative program focuses. For example, academic training in-country vs. specialized training off-shore, or some combination of these, at both undergraduate and graduate levels.

To qualify for training, participants are required to attain a certain level of proficiency in English. To a large extent English language training is provided in Yemen through the Yemeni American Language Institute. Contractor should assess the efficiency of this practice as opposed to or in combination with language training at the American Language Institute at Georgetown University for those trainees identified for training in the U.S. In this connection, contractor shall identify those causes which may be constraining the effectiveness of the Yemeni American Language Institute's English language program.

On the basis of their findings, contractor shall prepare a priority matrix which identifies fields in which the most urgent training needs exist, both in the short and intermediate terms, and institutions which can provide the necessary training in these fields.

The contractor shall analyze available estimates of manpower supply and demand and determine the extent to which these estimates reflect recent developments.

Contractor should, if necessary, develop independent manpower projections for the short and intermediate terms.

IV. Policy Alternatives:

The contractor shall define various policy options and identify alternative program strategies for addressing these options. Contractor shall at all times give maximum consideration to Mission and YARG overall objectives in forming a program strategy. Close liaison should be maintained with relevant YARG and Mission personnel.

V. Reports

The contractor shall submit a draft report to AID/Washington for review no later than three months after, and a final report no later than four months after commencement of this study. Contractor shall also be required to discuss details of the study with AID personnel as necessary.

Interview for Returnees

___ Identification Number

1. Sex (observe)
 1. Male
 2. Female

2. Is your age
 1. less than 20 years
 2. 20-24 years
 3. 25-29 years
 4. 30-34 years
 5. 35-39 years
 6. 40-44 years
 7. 45-49 years
 8. 50-54 years
 9. 55-59 years
 10. 60 or more years

3. Are you currently
 1. married; for how many years? _____
 2. single
 3. divorced
 4. widowed

4. Where were you born?
 1. San'a
 2. Hodeidah
 3. Taiz
 4. Sada'a
 5. Hajjah
 6. Dhamar
 7. Ibb
 8. Al-Beidah
 9. Al-Mahwit
 10. Ma'rebIf not in Yemen, in what other country? _____

5. Have you resided in any countries other than Yemen? (excluding visits)
 1. no (go to 6)
 2. yes; in what countries and for how many years?

<u>countries</u>	<u>no. of years</u>
1.	
2.	
3.	
4.	
5.	

6. Is your father's Qariya (village) located in
 1. San'a
 2. Hodeidah
 3. Taiz
 4. Sada'a
 5. Hajjah
 6. Dhamar
 7. Ibb
 8. Al-Beidah
 9. Al-Mahwit
 10. Ma'reb
 11. South Yemen
 12. not from Yemen

7. Currently, what is your father's main occupation? (type of work such as farmer, shopkeeper, shaykh, etc.) _____
8. How many years of schooling have you completed at the following levels?
1. Ma'lama: how many years did you complete? _____
2. Primary: how many years did you complete? _____
Where? _____
city/country
3. Intermediate: how many years did you complete? _____
Where? _____
city/country
4. Secondary: how many years did you complete? _____
Where? _____
city/country
What certificate(s) did you earn, if any? _____
9. Have you attended any training schools or universities? (exclude AID training).
1. no (go to 10)
2. yes; what are the

Names of the institutions and thier locations (city/country)	Type of training	No. of years	Cert./Deg. earned	Field of Specialization	Financed by
1.					
2.					
3.					
4.					
5.					

10. Were you working when you were selected to receive AID training?
1. no; were you a student? (go to 11) yes no
2. yes; with whom (Ministry, Division, Office) _____
employer (ministry, division, office)
where? _____
city/country
for how many months or years? _____
- what was your occupation or position title? _____

what were your basic duties? *(include field)*

how many people did you supervise? _____

what was your monthly salary *(as of termination date)*?

- | | |
|---------------------|---------------------|
| 1. less than 200 YR | 5. 1500-1999 YR |
| 2. 200-499 YR | 6. 2000-2499 YR |
| 3. 500-999 YR | 7. 2500- or more YR |
| 4. 1000-1499 YR | |

did you receive any benefits? *(e.g. Ramadan bonus)*

1. no
2. yes; specific types _____

11. Was your selection for the AID participant training program?
 1. initiated by your supervisor
 2. initiated by someone else
 3. activity sought by you

12. How important do you think the following factors were in your selection?

	Very Important	Not Very Important	Don't Know
Personal Contacts			
Personal Ability			
Language Ability			
Professional & Educ. Qualifications			
Job Needs			

13. How many other candidates were competing with you for the same AID training you received? _____

14. In order to participate in your AID training was a knowledge of English a pre-requisite?

1. no *(go to 15)*
2. yes; A) did you study English in Yemen prior to your AID training?
 1. no *(go to B)*

2. yes; where? _____
name of institution/city
 for how many hours per week _____; number of weeks _____
 what was your final grade? _____

B) did you study English in the United States prior to your AID training?
 1. no (go to C)
 2. yes; where? _____
name of institution

city/state
 for how many hours per week _____; number of weeks _____
 what was your final grade? _____

C) did you study English any place else prior to your AID training?
 1. no (go to D)
 2. yes; where? _____
name of institution

city/country
 for how many hours per week _____; number of weeks _____
 what was your final grade? _____

D) Do you feel the English language training you received was
 1. more than adequate for your studies
 2. adequate for your studies
 3. inadequate for your studies

E) In what ways do you think the English language training could be improved? _____

15. Please give the following information concerning your AID participant training.

Name of Institution and location (city/country)	Type of Training*	Field of Study	Cert./Deg. Earned	Dates Attended From/To	Final Grade
1.					
2.					
3.					
4.					
5.					

* Types of training (re: AID Handbook 10, pps. 3&4): 1. Academic - preparatory; 2. Academic - undergraduate; 3. Academic - graduate; 4. On-the-job training; 5. Observation training; 6. Specialized training (courses, seminars, etc.); mixtures will be reported as the one occupying most of the participant's time.

16. Once selected as an AID participant, did you help plan the training you were to receive?
 1. no
 2. yes

17. As an AID trainee, how much did language problems negatively affect your studies?
 1. considerably
 2. to some extent
 3. very little
 4. none

18. How do you feel about the level of difficulty of the courses you studied?
 1. too elementary
 2. too advanced
 3. about right level

19. Did your AID training proceed according to the pre-arranged time schedule?
 1. yes (go to 21)
 2. no; explain _____

20. How do you feel about the duration of your training program?
 1. too long
 2. too short
 3. right length

21. Were any substantial changes in your program made during training?
 1. no (go to 22)
 2. yes; what type of change?
 1. subject or field
 2. more academic
 3. more on-the-job
 4. changed to degree program
 5. lengthened program
 6. shortened program
 7. changed location/institutiondid you favor the change?
 1. yes
 2. no

22. During your AID training period, do you think any of the following were 1) a difficult problem; 2) something of a problem; or 3) not a problem?

1. cultural and social adjustment
2. location of training
3. family problems
4. financial problems
5. health problems
6. housing/transportation
7. legal problems
8. others, specify _____

diff.	some	not

Would you like to elaborate on any of these problems?

23. When you had problems or needed advice, who helped you most?

1. a fellow AID participant
2. another classmate
3. an American friend
4. a relative
5. a faculty member
6. your USAID counselor
7. someone from your Embassy
8. someone else, specify relation _____

24. Did you complete the full course of study agreed to by you and USAID?

1. yes (go to 25)
2. no; specify why _____

25. Before your AID training started, was there a written or verbal agreement between you and your government for mandatory government service upon your return?

1. no (go to 26)
2. yes; specify written? _____ or verbal? _____
for what length of time? _____

26. Was there an agreement guaranteeing you a job assignment upon your return?

1. no (go to 27)

2. yes; what was the agreement? _____

was that agreement fulfilled?

1. yes (go to 27)
2. no; why? _____

27. Were there any other agreements made concerning your post-training employment such as salary level, benefits, number of persons supervised etc.?

1. no (go to 28)
2. yes; specify _____

28. Please give the following information concerning all jobs you have held since you returned from your AID training. (if none go to 33)

	FIRST JOB	SECOND JOB	THIRD JOB
Employer (Min., Div., Off.)			
Location (city, country)			
Number of months/years			
Occupation or position title			
Field of speciali- zation and outlines			
Nc. of people supervised			
Salary range			

29. For each job you specified was your AID training utilized very much, moderately, a little, not at all.

	very much	moderately	little (if no marks in these columns, go to 31)	not
First Job				
Second Job				
Third Job				

30. In general, to what kinds of difficulties would you attribute the little or no utilization of your AID training you just mentioned?
1. irrelevance of training to the job
 2. lack of equipment, funds or other material resources
 3. lack of support from your supervisor
 4. lack of trained staff and education of co-workers
 5. other, specify _____

31. How much of the knowledge you gained from your AID training have you been able to transmit to others?
1. alot
 2. quite a bit
 3. some
 4. a little

32. What method(s) have you used for conveying this knowledge to them?
1. informal discussions
 2. formal lectures and training programs
 3. on-the-job training of a counterpart
 4. publications and written reports
 5. other, specify _____

33. Are you currently
1. unemployed (go to 35)
 2. employed

34. Concerning your present employment, are you 1) not satisfied (why), 2) satisfied, 3) very satisfied with the following

1. type of work (tech., acad., etc.)
2. amount of responsibility
3. wages and benefits
4. field of specialization
5. mandatory service
6. relevance to training
7. prospects for advancement
8. prospects for future training
9. other, specify _____

not (why)	sat.	very

35. Would you like to remain in your current field of specialization?
1. yes (go to 36)
 2. no; what field interests you most? _____

36. What are your plans for the next year or so?
1. remain in current employment status, not seek work (includes employed and unemployed)
 2. seek employment in a (another) government office in Yemen
 3. seek employment in a private business or industry in Yemen
 4. start my own business in Yemen
 5. seek employment abroad
 6. get more education
 7. other, specify _____
-

37. Do you have any comments pertinent to any aspects of your AID training or any aspects of this questionnaire?

NAME:
ADDRESS:

Telephone:
Number of times contacted:
Length of time of interview:

Remarks:

UNITED STATES GOVERNMENT

Memorandum

TO : NE/DP, Mr. Bradshaw Langmaid
THRU : NE/DP, Joan Silver
FROM : NE/DP, Annette Binnendijk *A.B.*

DATE: April 19, 1977

SUBJECT: Trip Report to the Yemen Arab Republic

During three weeks of March 1977, a team of three went to the Yemen Arab Republic to evaluate the AID Development Training Project 020. The three were Annette Binnendijk from the Office of Development Planning, Near East Bureau, David Kinsey, a Middle East education specialist from the University of Massachusetts, and Marilyn Sharif, a statistician from the Regional Staff, Bureau of Census PASA.

The team followed a scope of work developed in November 1976. The scope of work stated:

"The objective of the development training study is to provide information on which the current participant training program can be evaluated and to provide a basis on which a second project can be structured so as to effectively respond to training needs in the Yemen Arab Republic."

The specific tasks in the scope of work were allocated among the team members prior to departure based on background specializations and time factors. The responsibilities of each team member were as follows:

Marilyn Sharif was responsible for interviewing the participants of the AID training project 020 who had completed their training and returned to the Yemen. A questionnaire was designed before leaving for the Yemen. The purpose of the interviews was to collect information relevant to the evaluation of the training project. The major types of data collected from returned participants include:

- (1) personal characteristics such as age, sex, social and ethnic background.
- (2) pre-training qualifications such as language proficiency, educational attainment and employment prior to AID training.
- (3) information about AID training, such as the selection process, field and institutions of study, performance, attitudes and problems during training.



- (4) information about post-training, such as location and conditions of employment, utilization of training, mandatory agreements governing employment and future career plans.

Marilyn Sharif worked from a list of returned participants provided by the AID mission. The list may have been incomplete and was also out-of-date with regard to current place of employment of the returned participants. Neither the AID mission nor the Central Planning Organization have a follow-up system through which they can keep informed of the whereabouts of trainees after they return to the Yemen.

Of the listed 65 AID participants under project 020 who had completed their training programs, Marilyn Sharif succeeded in interviewing 44. The others were unreachable due either to death, sickness, emigration or location in remote villages. She interviewed in Sanaa, Taiz and Hodeida. Preliminary tabulations of some sections of the interviews are now available. A report on the complete survey results will be forthcoming in the next few weeks.

David Kinsey, who was in the Yemen for two weeks, concentrated on the following major issues:

- (1) an analysis of the effectiveness of the English language training received by Yemeni participants at the Yemen-American Language Institute in Sanaa.
- (2) an evaluation of the Yemen Government's system of selecting, monitoring and placing participants.
- (3) an assessment of the potential for in-country training at Sanaa University and other educational institutions and possible AID support as an alternative/complement to training abroad.

David Kinsey's report has not yet been received by AID, but should be in the next week or two.

Annette Binnendijk covered the remaining issues from the scope of work. These included:

- (1) an assessment of current and projected trained manpower requirements in the public and private sectors. This involves a review of the adequacy of available data sources and possible adjustments to earlier manpower demand projections.
- (2) an assessment of the current and projected supply of trained manpower. This includes projections of student-flows at all education levels from in-country institutions and also from training programs abroad.

- (3) an analysis of the major gaps in meeting manpower requirements and the nature of education bottlenecks. Related questions include possible overlapping and competition for qualified candidates for training programs abroad among bilateral and multilateral donors.
- (4) an evaluation of the current AID Development Training Project 020, including AID/Mission procedures and staffing, relations with the Yemen Government, role in selection, monitoring, placement and follow-up. Also included is an assessment of the project's impact on objectives and purpose.
- (5) a consideration of alternatives and recommendations for the Development Training Project 040. This includes assessment of alternatives for the new project such as size of the program, type of training, fields of specialization and countries of training. Other questions will be addressed such as the role of AID vs. YARG in the selection, monitoring and placement process, the method and place of English language training, AID staff and consultant requirements, project evaluation and follow-up of participants, and AID's role in support of data collection and studies in the field of manpower planning.
- (6) development of a scope of work for sample surveys relevant to manpower planning to be funded with the project 020.

TDY Debriefing - A debriefing of the trip will be scheduled; you will be notified. During this meeting I will give my preliminary views on major issues raised in the scope of work and answer any questions.

Schedule - A draft of the Evaluation Report will be completed in the next two to three weeks. A copy will be sent to the AID Mission in Yemen for review and then the final report will be written.

Attachment: List of Meetings
Evaluation Report Outline

cc:

NE/DP: P. Sellar
NE/DP: F. Denton
NE/NENA: E. Glaeser
NE/CD: R. Perry
NE/TECH: D. Steinberg
NE/TECH: J. Dalton
NE/TECH: J. Smith
NE/NENA: J. Knoll

NE/DP/PAE: ABinnendijk:jck:4/19/77

LIST OF MEETINGS

Al Ruiz - Director of AID Mission
Roy Wagner - Deputy-Director of AID Mission
Kurt Shafer - Program Officer, AID Mission
Dominic D' Antonio - Training Officer, AID Mission
Lee Ann Ross - Economist, AID Mission
David Ransom - DCM, U.S. Embassy
Marjorie Ransom - Public Affairs Officer, USIS
Ruth Montalvan - USIA English Teaching Consultant
Johnathan Seely - Director of Courses, YALI
Peggy Gall, Kathy Uphouse and Barbard Opila - English Teachers, YALI
Cynthia Myntti - U.S. graduate student in anthropology; dissertation
on fertility in the Yemen
Clive Sinclair - Economics Professor at Durham University; former
ILO manpower consultant to YARG
Jeff Richards - Haskins and Sells, Taiz household survey fieldwork
Väinö Kannisto - UN Inter-regional adviser on Demographic and
Social Statistics
Abdel Basit M. A. Babiker - UNDP Education Statistics Adviser to
Ministry of Education
Mehar Abdulla - UNDP Non-Formal Education Adviser to Ministry of
Education
Tasheen Alkoudsi - UNDP Data Processing Manager of the Census
Abdel Galiel Nouman - UNDP Senior Programme Assistant
Ahmed Raja - UN Planning Advisor to CPO
Adnan Habbab - Director of Programmes, Regional Office of IPPF;
former UNDP Statistics Advisor to CPO
Clive Smith - British Counsel
Arend Huitzing - Dutch Foreign Assistance
Abdel Karim El-Iyriani - Chairman of CPO, Minister of Education
and President of Sanaa University
Mohammed Mattahar - Vice-President of Sanaa University
Abdul Ali Othman - Professor of Sociology, Sanaa University
Mohammed Abdul Wahab El-Ariki - Acting Chairman of CPO
Saad Mahfous - Director of Loans and Technical Assistance
Department, CPO
Anwar Al-Harazi - Director of Projects Department, CPO
Abdel Rabbo - Director of Planning Department, CPO
Ina Hussein - Head of Scholarships Section, CPO
Taher Ali Saif - Director of Statistical Office, CPO

44 returned participants from the AID Development Training Project 020

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NE/DP: ABINNENDIJK: JCK
06/13/77: EXT 29136
NE/DP: POSELLAR

NE/NENA: EGLAESER
NE/TECH: DSTEINBERG
AA/NE: JWHEELER

NE/TECH: MHURLEY
NE/NENA: JKNOLL

PRIORITY SANA

AIDAC

E.O. 11652: N/A

TAGS:

SUBJECT: PROJECT COMMITTEE REVIEW OF EVALUATION REPORT
ON AID'S PARTICIPANT TRAINING EFFORTS

REF: SANA 2111, PARA. 3.

1. PRIMARY PURPOSE OF MEETING WAS TO REVIEW EVALUATION FINDINGS IN THE REPORT AND REACH A POSITION ON THE VARIOUS ALTERNATIVES AND RECOMMENDATIONS CONCERNING DESIGN OF NEW PROJECT {040}. THE REPORT WAS WELL RECEIVED. THERE WAS AGREEMENT ON THE FOLLOWING POINTS REGARDING THE NEW PROJECT'S DESIGN:

{A} - THE NUMBER AND TYPES OF PARTICIPANTS FOR TRAINING SUGGESTED IN EVALUATION REPORT SHOULD BE THE BASIS FOR THE PP. THE NUMBER SHOULD, HOWEVER, BE FLEXIBLE UPWARD PROVIDED QUALIFIED CANDIDATES WERE AVAILABLE.

{B} - SINCE QUANTITATIVE RESULTS OF THE SINCLAIR-SOCKNAT MANPOWER PROJECTIONS WERE QUESTIONABLE, IT SHOULD NOT BE USED AS A GUIDE OR CONSTRAINT ON THE SIZE OR COMPOSITION OF AID'S PARTICIPANT TRAINING PROJECT.

PS
AB
EG
MH
DS
JK
JW

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| 2

{C} - AID SHOULD DEVELOP A SCHEME OF FLEXIBLE GUIDELINES LIMITING THE PARTICIPANTS' FIELDS OF SPECIALIZATIONS TO AREAS OF PRIORITY DEVELOPMENT CONCERN TO YEMEN AND ALSO TO EXTENT POSSIBLE THOSE FIELDS THAT ADDRESS AID'S NEW DIRECTION OBJECTIVES.

{D} - THERE SHOULD BE SOME CRITERIA FOR DISTINGUISHING BETWEEN TRAINING DONE UNDER THIS PROJECT AND UNDER OTHER AID PROJECTS.

{E} - AN ISSUE WITHIN THE COMMITTEE WAS THE DESIRABLE AMOUNT OF RIGIDITY/FLEXIBILITY IN CHANGING OR LENGTHENING A PARTICIPANT'S TRAINING PROGRAM. ONE MEMBER FELT THAT FOR LONGER TERM ACADEMIC PROGRAMS THERE OUGHT TO BE FLEXIBILITY FOR EXTENDING TRAINING TO TAKE FULL ADVANTAGE OF EXCEPTIONALLY ABLE PARTICIPANTS AS THEY EMERGE. OTHERS THOUGHT THAT GENERALLY PROGRAMS SHOULD BE RIGID AND THAT PARTICIPANTS UPON COMPLETION OF THEIR AGREED UPON PROGRAM SHOULD RETURN TO YARG EMPLOYMENT FOR SEVERAL YEARS SERVICE BEFORE RE-APPLYING FOR FURTHER EDUCATION. THIS ISSUE AND GUIDELINES SHOULD BE ADDRESSED IN THE PP.

{F} - CURRENTLY THERE ARE NO PROJECTIONS OF MANPOWER REQUIREMENTS IN THE YEMEN THAT MIGHT GUIDE TRAINING PROGRAMS TO ADDRESS PRIORITY DEVELOPMENT FIELDS. THEREFORE, THERE IS A NEED FOR STRENGTHENING MANPOWER PLANNING CAPABILITIES OF THE CPO. AID MIGHT HAVE A ROLE IN TRAINING YEMENIS IN MANPOWER PLANNING AND IN PROVIDING ADVISORS TO THE CPO IF REQUESTED.

{G} COMMITTEE CONCLUDED YALI CURRICULUM MUST BE CHANGED SIGNIFICANTLY IF THE SIZE OF THE TRAINING PROJECT IS TO BE INCREASED, AND IT SHOULD EMPHASIZE INTENSIVE SHORT-TERM TRAINING COURSES AS OUTLINED OPTION 3 OF THE REPORT. THERE WAS AGREEMENT THAT THIS WAS PREFERABLE TO SENDING PARTICIPANTS WITH NO ENGLISH DIRECTLY TO THE U.S. WE SUGGEST ATTEMPT BE MADE TO CONVINCING THE YARG THAT THESE SHORT-TERM INTENSIVE COURSES IN THEIR BEST INTEREST IF EXPANDED TRAINING PROJECT TO BE SUCCESSFUL AND IF THEY WANT TO SHORTEN THE LENGTH OF TIME SPENT ON ENGLISH TRAINING IN THE YEMEN. TO THE EXTENT THAT THE NEW PROJECT EMPHASIS IS ON UNDERGRADUATE DEGREE TRAINING, CONFLICTS BETWEEN ATTENDING YALI AND JOB OBLIGATIONS WOULD BE REDUCED. IF THE YARG REMAINS UNCONVINCED RE INTENSIVE COURSES, WE SUGGEST IT MAY BE NECESSARY FOR YALI TO COMBINE TWO METHODS--EVENING CLASSES FOR THOSE THAT MUST WORK DURING THE DAY, PLUS THE INTENSIVE COURSES PARTICULARLY FOR UNDERGRADUATE CANDIDATES AS DISCUSSED ABOVE.

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IT WAS FELT THAT IN THE SHORT-TERM, YALI WAS BEST INSTITUTION FOR TEACHING PARTICIPANTS ENGLISH IN THE YEMEN, BUT THAT IN LONGER TERM, MIGHT CONSIDER AID SUPPORT TO NI'PA OR SANA UNIVERSITY FOR THIS FUNCTION.

{H} - THE MISSION WILL REQUIRE A FULL-TIME TRAINING OFFICER. PLEASED TO NOTE THAT MOB SUBMISSION PROPOSES THIS.

2. IN ADDITION TO FOREGOING, MISSION SHOULD ADDRESS FOLLOWING POINTS IN DEVELOPING PP:

{A} OBTAIN YARG AGREEMENT THAT NOT LESS THAN 15 PERCENT OF SCHOLARSHIP UNDER PROJECT WILL BE AWARDED TO WOMEN;

{B} OBTAIN YARG AGREEMENT ESTABLISH ADEQUATE MANPOWER PLANNING UNIT WHETHER WITH AID OR OTHER DONOR ASSISTANCE, AND IF THE LATTER OBTAIN INFORMATION SATISFACTORY TO AID ON HOW AND WHEN THIS WILL BE DONE {THIS COULD BE HANDLED AS A COVENANT IN GRANT AGREEMENT IF NOT POSSIBLE TO RESOLVE SOONER};

{C} OBTAIN YARG AGREEMENT AS A CONDITION TO AID FUNDING TO MAKE THE CHANGES IN YALI REFERRED TO IN PARA ONE ABOVE, OR PROPOSE A VIABLE ALTERNATIVE TO IMPROVING LANGUAGE TRAINING SITUATION;

{D} PRESENT IN THE PP AND REFLECT IN GRANT AGREEMENT A BROAD ELIGIBLE LIST OF FIELDS ELIGIBLE FOR AID TRAINING, BASED TO EXTENT POSSIBLE ON INFORMATION IN EVALUATION REPORT. SUCH LIST COULD BE MODIFIED SUBSEQUENTLY IF NECESSARY;

{E} RELATE THE PROPOSED LEVEL AND TYPES OF TRAINING MORE SPECIFICALLY TO EXTENT POSSIBLE TO THE MANPOWER SUPPLY/ DEMAND INFORMATION AVAILABLE IN EVALUATION REPORT, SUPPLEMENTED WITH ANY ADDITIONAL INFO AVAILABLE TO FILL GAPS.

3. MISSION IS AUTHORIZED TO PREPARE FINAL PP THIS PROJECT TAKING FOREGOING GUIDANCE INTO ACCOUNT. WILL ATTEMPT FUND IN FY 77 IF PP READY AND FUNDS AVAILABLE; OTHERWISE WILL PLAN FUND ASAP IN FY 78. 44

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