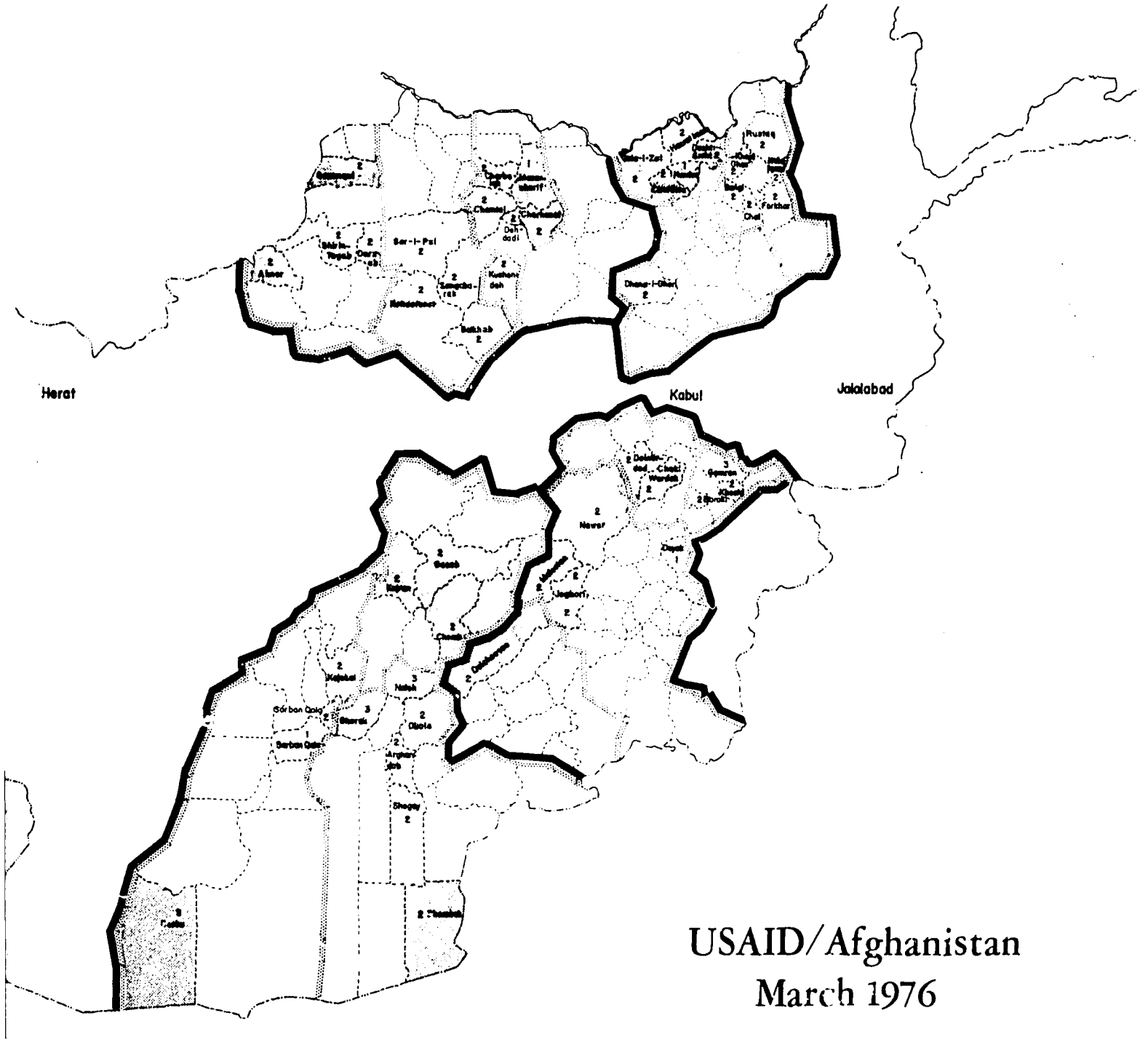
PROJECT PAPER
BASIC HEALTH SERVICES
AFGHANISTAN



USAID/Afghanistan
March 1976

PD-AAQ-027

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

TO BE COMPLETED BY ORIGINATING OFFICE

1. TRANSACTION CODE (*"X" appropriate box*): [X] Original [ ] Change [ ] Add [ ] Delete — PP — DOCUMENT CODE 3

2. COUNTRY/ENTITY: AFGHANISTAN

3. DOCUMENT REVISION NUMBER:

4. PROJECT NUMBER: 306-0144

5. BUREAU: a. Symbol: NE; b. Code: 4

6. ESTIMATED FY OF PROJECT COMPLETION: FY 78

7. PROJECT TITLE - SHORT (*stay within brackets*): [BASIC HEALTH SERVICES]

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION: a. INITIAL mo. 5 yr. 76; b. FINAL FY 78

9. ESTIMATED TOTAL COST ($000 or equivalent, $1 =)

a. FUNDING SOURCE	FIRST YEAR FY 76			ALL YEARS		
	b. FX	c. L/C	d. Total	e. FX	f. L/C	g. Total
AID APPROPRIATED TOTAL						
(Grant)	(1,120)	( )	(1,120)	(3,936)	( )	(3,936)
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S. 1.						
Other U.S. 2.						
HOST GOVERNMENT		321			1,837	1,837
OTHER DONOR(S)	163			335		335
TOTALS	1,283	321	1,120	4,271	1,837	6,108

10. ESTIMATED COSTS/AID APPROPRIATED FUNDS ($000)

a. Appropriation (Alpha Code)	b. Primary Purpose Code	c. Primary Tech. Code	FY 76 d. Grant	FY 76 e. Loan	FY T.Q. f. Grant	FY T.Q. g. Loan	FY 77 h. Grant	FY 77 i. Loan	ALL YEARS j. Grant	ALL YEARS k. Loan
PH	400	590	1,120		510		1,832		3,936	
TOTALS			1,120		510		1,832		3,936	
11. ESTIMATED EXPENDITURES					188		968			

12. PROJECT PURPOSE(S) (*stay within brackets*) [ ] Check if different from PID/PRP

[1. To provide basic health services with emphasis on services for women and children to 830,000 persons living in fifty Minor Civil Divisions within four of Afghanistan's six health regions.
2. To provide two or more Alternative Health Delivery Systems (AHDS) which when widely replicated will provide a minimal health service for those persons who will not have reasonable access to a BHC.]

13. WERE CHANGES MADE IN BLOCKS 12, 13, 14, or 15 OF THE PID FACESHEET? IF YES, ATTACH CHANGED PID FACESHEET.

[ ] Yes [X] No

14. ORIGINATING OFFICE CLEARANCE

Signature: Charles R. Gurney

Title: Family Planning Development Officer

Date Signed: mo. Mar day 01 yr. 76

15. Date Received in AID/W, or For AID/W Documents, Date of Distribution: mo. day yr.

AID 1330-4 (7-75)

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PART 1. SUMMARY AND RECOMMENDATIONS

A. INTRODUCTION

1. U.S. Assistance Priority

The priority for U.S. assistance to the health sectors of developing countries and the linkage of improved health to general socio-economic development is clearly expressed in the Foreign Assistance Act and in AID policy, as evidenced by the following passage from AID Handbook #1:

> "Lower population growth rates and improved health are essential to speed up social-economic development and improve the quality of life in LDCs. These interrelated goals are consequently one of the three priorities toward which, with strong Congressional backing, AID directs its assistance." (Part III-3, p.1)

The Basic Health Services (BHS) project described in this Project Paper will address this Agency priority and will display nearly all of the general characteristics of projects which AID has determined to be necessary for reaching the rural poor both in terms of effective health services and cost. More specifically, the Mission finds that the BHS project almost perfectly fits the following description of a health project from Handbook #1:

> "AID's health policy places a high priority on helping LDCs develop systems to deliver integrated packages of health, family planning, and nutrition services to broad segments of their population at minimal cost. It places an equally high priority on health planning, research and evaluation, so as to optimize the use of AID and LDC health funds, and on the management of the environment so as to improve the quality of life. Accordingly, Missions and Bureaus should encourage (1) special attention to mothers and pre-school children, a particularly vulnerable group and one whose health ultimately affects the entire family, including income earners, (2) the linking of formal with non-formal health systems, (3) health development planning which is multi-disciplinary and focuses on the poor, (4) disease control, water supply improvement, sanitation and other preventive programs, and (5) innovative health-delivery systems which are accessible

to the poor majority at costs low enough to encourage their replication in the same and other LDCs." (Part III-3, p.2)

The number of beneficiaries for the Phase I project, ending FY 1978, is 830,000 -- of whom females, children and adults, will receive health services in proportions corresponding with their numbers in the target populations. The achievement of this target in less than three years in Afghanistan will be nothing less than revolutionary, for no other project has reached this magnitude of females. A prerequisite to the achievement of this target is the training of Auxiliary Nurse Midwives (ANMs) and assignment to Basic Health Centers in their home regions to provide medical services to female patients. The fulfillment of this prerequisite or condition is an integral part of the Phase I project. The Mission therefore concludes, with respect to both benefit incidence and the direct involvement of female paramedical personnel, that two important sections of Policy Determination 60 on the "Integration of Women into National Economies" are being addressed in this Phase I project. These are as follows:

"1. Consider how the capacities of women can be more fully and effectively utilized in the design and implementation of each AID-supported project or program, and include in all plans or proposals a section which analyzes the problems and discusses possible remedial actions.

"2. Take all appropriate steps to increase both the participation of and benefits to women; and encourage and support LDCs and donors, both multi-lateral and bilateral and both governmental and nongovernmental, in the undertaking of similar actions." (AID Handbook #1, Part IV-5, p.1)

2. Conformance with the DAP

USAID/Afghanistan's Development Assistance Plan (DAP) established criteria to improve project design and to improve the probability of successful implementation in the Afghan context. These criteria are discussed below.

A Phased Approach.

The DAP establishes the need in Afghanistan to proceed in small, incremental steps from an experimental design through a larger test stage

to full project implementation over a period of years. The predecessor to the Basic Health Services project was "Population/Family Planning," project 306-11-570-110, which was composed of several discrete sub-projects: a general commodity element (vehicles and contraceptives); a demographic survey and KAP study; a management advisory team in the Ministry of Public Health (MOPH); setting up a training institution for auxiliary nurse midwives; and ad hoc support to the Afghan Family Guidance Association (AFGA). With the completion of the demographic survey and the spinning off of assistance to AFGA into a separate clinic expansion project, it has been the Mission's intention for more than one year to fashion the remaining activities, in combination with some new elements, into an integrated Basic Health Services project. In brief, then, the BHS project will put together the management systems (personnel assignment, logistics and supply, clinic information systems), trained personnel (including the vital female auxiliary nurse midwives) and rented and constructed facilities necessary to provide health services to the rural population in four health regions. During this first phase of an integrated project, work will also be carried out on the design and field testing of Alternative Health Delivery Systems (AHDS) which, if successful, would become the model(s) for rapidly expanding health services to rural people in Phase II. Thus, we conclude that the BHS project as described in this paper fits the DAP's idealized description of an evolutionary, phased approach to project development.

Simplicity.

The DAP calls for simplicity in project design by minimizing the number of components which must be manipulated at a given time to generate project outputs. The BHS project is not simple in these terms; however, the Mission and the MCPH are relying on the mitigating fact that several elements are on-going. In addition, the Mission and MCPH have agreed upon a Phase I scope of work which is substantially smaller than the scope proposed in the FY 75 Project Paper. (See also Annex A for AID/W views on the FY 75 PP.) In the two and one-half year implementation span, the BHS project will activate approximately 50 Basic Health Centers (BHCs) in four regions as compared with 180 BHCs nationwide proposed in FY 75. There has been, therefore, a scaling down of planned outputs to conform with our mutual estimate of extant and potential capability.

Government of Afghanistan (GCA) Commitment.

The DAP establishes the criterion that the GCA must be committed to a project concept if it is to succeed in implementation. Since July 1973 there has been no doubt that the new Republican regime has been unequivocally committed on a policy level to providing modern health

services to the rural population. However, and perhaps more than in any other sector, the GCA has encountered considerable difficulty in translating health policy statements into project concepts and implementation. Thus, while the USAID and MCPH were engaged in the implementation of the discrete sub-projects under the Population/Family Planning project and while there was nearly continuous dialogue on the central concepts and scope of activity for the Basic Health Services project, agreement was not reached until the Fall, 1975. At that time the project concept and a bare outline of an implementation plan were presented to the GCA cabinet for its review and approval. The GCA took this unusual step with the explicit knowledge that the U.S. could not make a commitment, even "in principle" prior to AID/W approval of the project. (Refer to Annex 2 for the GCA request for assistance.) We cannot envision a more substantial demonstration of GCA commitment to a project than this.

Near Term Results.

In order to encourage the sustained commitment of the GCA, the DAP recommends that all projects have a near- to medium-term payoff. The BHS project is designed to provide services to rural people at the rate of 830,000 or more clinic visits per year by the end of the Phase I project. This target compares with the approximate 550,000 persons, mostly urban, who are currently provided government health service. By the end of FY 78 the number of people served will reach about 145 percent more than the current service level. If such a service level can be achieved in less than three years' time, the near-term result criterion will have been fully met.

Maintenance of USAID Leverage.

The DAP hypothesizes that in projects where the USAID provides inputs before the GCA, leverage is lost. The method which the USAID will employ to overcome that problem in this project is Fixed Amount Reimbursement (FAR). Since the purpose of the project is to provide health services to rural people, FAR payments for both rentals and construction will only be made upon the completion of construction (or the renovation of a rented facility) and the achievement of an operational status, e.g. the assignment of BHC staff, the link-up of the BHC to supply and support systems, etc. The FAR method places the responsibility for performance and the assumption of financial risk on the shoulders of the GCA; concomitantly, both financial and performance risks are minimized for USAID. Both the philosophy and the procedure have been tested and are being employed in other USAID-assisted projects and are understood and accepted at the highest levels in the GCA.

B. RECOMMENDATIONS

1. Approval of the Phase I Basic Health Services project and authorization of funding levels as follows:

	FY 1976	Transition Quarter	FY 1977	FY 1978	Total
Health Funds (Non Title X)	$1,089	$510	$1,787	$414	$3,800
Population Funds (Title X)	31		45	60	136
	$1,120	$510	$1,832	$474	$3,936

2. Administrative determination that the Basic Health Services project is a non-capital technical assistance activity within the meaning of applicable sections of the FAA. The planned amounts, exclusive of inflation allowances, for technical services (advisory services, training, and commodities) and physical construction -- are $2,040,000 and $1,552,000 respectively -- or 57 percent for technical services and 43 percent for physical construction. Since local financing of construction will be made through fixed amount reimbursement only after each Basic Health Center has achieved an operational service status, the intent of U.S. assistance goes beyond the simple physical completion of structures -- the latter of which is the definition of a capital project under section 611(c) of the FAA.

3. Waiver of competitive selection procedures for on-going advisory services now provided by Management Sciences for Health (MSH) of Cambridge, Mass. and the University of California, Santa Cruz (UCSC).

FINANCIAL DATA

(US $ 000)

	FY 1976 (MM)	FY 1976 $	Transition Quarter (MM)	Transition Quarter $	FY 1977 (MM)	FY 1977 $	FY 1978 (MM)	FY 1978 $	Total $
1. PERSONNEL									
a. Direct Hire									
Project Advisor			(3)	24	(12)	50	(12)	62	136
b. Contract									
Public Health Advisor	(12)				(12)		(3)		
Mgt & Info Sys Adv	(12)				(12)		(3)		
Training Advisor	(12)				(12)		(3)		
Health Delivery Systems Adv	(10)				(12)		(3)		
Field Trainer	(10)				(12)		(3)		
Short-term Consultant	(3)				(3)				
Total MSH Personnel Costs	(59)	390			(63)	392	(15)	151	933
PH Nurse Educator	(12)				(12)		(3)		
Nurse Midwifery Edu	(12)				(12)		(3)		
Total UC/SC Personnel Costs	(24)	120			(24)	127	(6)	31	278
Total		$ 510		$ 24		$ 569		$ 244	$ 1,347
2. COMMODITIES									
Audio Visual Training/ office equipment-MSH		10				10			20
Contraceptives:Jelly/ Foam/IUD		31				45		60	136
Total		$ 41		$		$ 55		$ 60	$ 156
3. PARTICIPANTS									
Contract									
a. MSH (6x4 MM)	(24)	32			(24)	33			65
b. ANM (6x9 MM)	(54)	51			(54)	52			103
Sub-Total		83				85			168

Table 1 (contd)

	FY 1976	Transition Quarter	FY 1977	FY 1978	Total
Direct					
c. MA in Health Planning (2x24 MM)	(24) 17			(24) 16	
d. Short-term Training for Eng Div (8x6 MM)	(24) 46		(24) 45		
Non-deg acad (2x12MM)			(24) 18		
e. Non-deg in Sup & Trans Mgt Acad (1x12MM)	(12) 9				
Special (1x12MM)			(12) 22		
f. MA in Rural Health Admin acad (1x24 MM)	(12) 9			(12) 8	
Non-deg (1x12 MM)			(12) 9		
g. MOPH Reg & Prov Pers - Special (1x6MM)			(6) 11	(6) 12	
Third Country Tng (3x1MM)			(3) 3	(3) 3	
h. BHC-Special (1x6 MM)			(6) 12	(6) 11	
Third Country Tng(3x1MM)			(3) 3	(3) 3	
Sub-Total - Direct	81		123	53	257
Total	$ 164		$ 208	$ 53	$ 425
4. OTHER COSTS					
Basic Health Centers(FAR)	316	486	750		1,552
Rents	15				15
Personnel & Per Diem			18	18	36
AHDS	26		35		61
Contingency (15% on FAR)	48		185		233
Inflation (4% annually on FAR)			12	99	111
Total	$ 405	$ 486	$1,000	$ 117	$ 2,008
GRAND TOTAL	$1,120	$ 510	$1,832	$ 474	$ 3,936

Per diem for in-country training, out of country participant travel on Ariana routes, medicament kits, housing and in-country travel for US technicians will be provided from GOA trust funds administered by USAID.

C. PROJECT DESCRIPTION

The MOPH's initiatives in public health have a fairly long history, but special emphasis on the rapid expansion of basic services to rural people has been largely the initiative of the government which came to power in July 1973. USAID and MOPH cooperation began in 1973 with the implementation of two activities: the Auxiliary Nurse Midwife (ANM) training project and the Management for Rural Health project. Through the midwife project, USAID has assisted in the training of female paramedicals who are the critical personnel for the delivery of services to Afghan females. Through the management project, organizational, administrative, personnel and logistical issues -- relating primarily to expanding rural health services -- have been identified, studied, and solutions determined. Testing of ways and means to improve the effectiveness and efficiency of BHCs has also occurred in one province. Thus, the groundwork has been laid for the Phase I project.

1. Project Design

The health sector goal for all MOPH activities is the improvement of the health of the Afghan population. Goal indicators are expressed in terms of declines in morbidity and mortality by improving nutrition and treating measles, pneumonia, intestinal disorders, anemia, and the introduction and use of contraceptive technology. The impact on health status, as discussed in this paper, as a result of the Phase I project, will be medium to long term and the function of several variables beyond the direct provision of health services.

The project purposes are:

> "To provide basic health services with emphasis on services for women and children to 830,000 persons living in 50 Minor Civil Divisions within four of Afghanistan's six Health Regions."
>
> "To provide two or more Alternative Health Delivery Systems (AHDS) which when widely replicated will provide minimal health service for those persons who will not have reasonable access to a BHC."

The Mission has consciously selected project purposes expressed in terms of services delivered to a target population and systems to be developed, AHDS, rather than an intermediate "institutional" objective such as "strengthening the MOPH's basic health service network" wherein the actual delivery of service to people might be put into the assumption column of the logical framework. The acid tests for this Phase I project are

whether or not the health services planned in this project are actually delivered to rural people and whether or not the AHDS are actually developed and tested.

To achieve these purposes the MCPH will cooperate to generate the following important outputs: (1) establishing a regionalized supervisory and support operation to backstop the BHCs within the project; (2) the training and assignment of BHC field staff, including the vital auxiliary nurse midwives; (3) establishing 50 operational BHCs inclusive of functioning logistical and information systems; and (4) the training and deployment of AHDS personnel in two or more pilot areas.

2. Beneficiaries.

The significance of the project is that while only about one seventh of the BHC infrastructure (planned completed size of 325 BHCs) will become operational under this Phase I project, the number of rural beneficiaries will be 830,000 -- representing a 145 percent increase over those currently served. By MCPH estimates these 830,000 people will represent about 50 percent of the estimated population within the ~~BHC~~ catchment areas. More significantly, females, children and adults will be given service in proportion to their representation in the population -- a significant change from the current baseline condition wherein the ratio of female to male clients is very low. Experience in the Parwan pilot has indicated that it will be possible, with proper staffing of BHCs, to increase female attendance to parity with males.

3. Implementation.

The basic implementation plan for each of the four health regions can be illustrated as follows, taking the Ghazni region as an example. Within two months after the signing of the first Project Agreement, MCPH teams will select nine BHC sites within the region, according to mutually agreed criteria. Since the purpose of the project is the provision of service, the MCPH will rent facilities in four to five sites. Upon the renovation of these facilities, the installation of furniture and equipment and the assignment of staff, these facilities will be certified for fixed amount reimbursement of agreed rents. This will occur by the seventh month of the project. Previously in the fifth month of the project, construction will have begun by private contractor on the agreed Ghazni sites. Such construction will be conditional on agreed engineering drawings, layout and agreed cost estimates for fixed amount reimbursement purposes. The MCPH's Construction and Engineering Division will have been strengthened with the addition of engineering and technical staff to supervise, with the

USAID observing, the contractors. As construction proceeds over an approximate period of 15 months, the MOPH's Presidency of Basic Health Services will have received new professional staff. The key minimal staff -- physician or senior nurse, an auxiliary nurse-midwife, and two other paramedical personnel (e.g. sanitarian, compounder or male nurse) will be identified from currently available manpower pools or from graduating classes for assignment to BHCs. The BHS Presidency, with the assistance of the USAID management contractor, will perform in-service occupational and team training with the BHC manuals and materials already developed and to be expanded in Phase I. Simultaneously the MOPH will establish regional health organizations, which organizational model has already been developed and partially implemented. As construction is completed for individual BHCs, furnishings and equipment will be installed and the supply linkage established from the central warehousing facility through the regional administrative unit to the BHCs. The newly-trained personnel, or those who were staffing rented facilities, will be assigned to the new structures. Approximately 19 to 22 months after the first Project Agreement will have been executed, the first nine new BHCs will be certified "operational" and FAR payment made by USAID. With the beginning of service, the BHC staff will collect data on the health status and needs of the client population for the purpose of tailoring services to priority need and to activate the clinic information system upon which subsequent team training will be based as well as internal evaluation at the BHC, region and national level. On the average, each BHC will be expected to receive 50 clients per day, or an annual rate of about 16,000 by the end of the first year of operation. During this period, a referral system will be activated for cases which are beyond the capabilities of the BHC staff. Each of the other health regions -- Kandahar, Kunduz and Balkh -- will be activated in the same manner by approximately 26 to 28 months from the first Project Agreement.

The Alternative Health Delivery Systems models will proceed on a separate track under the supervision of the Basic Health Services Presidency and with the assistance of the management advisors. The first AHDS model will be designed within about seven months of the first Project Agreement and the first pilot site selected after about 10 months. During this period MOPH staff will be trained in the model's concepts and the mode of implementation with the start of field activity about one year after the first Project Agreement.

4. Coordination.

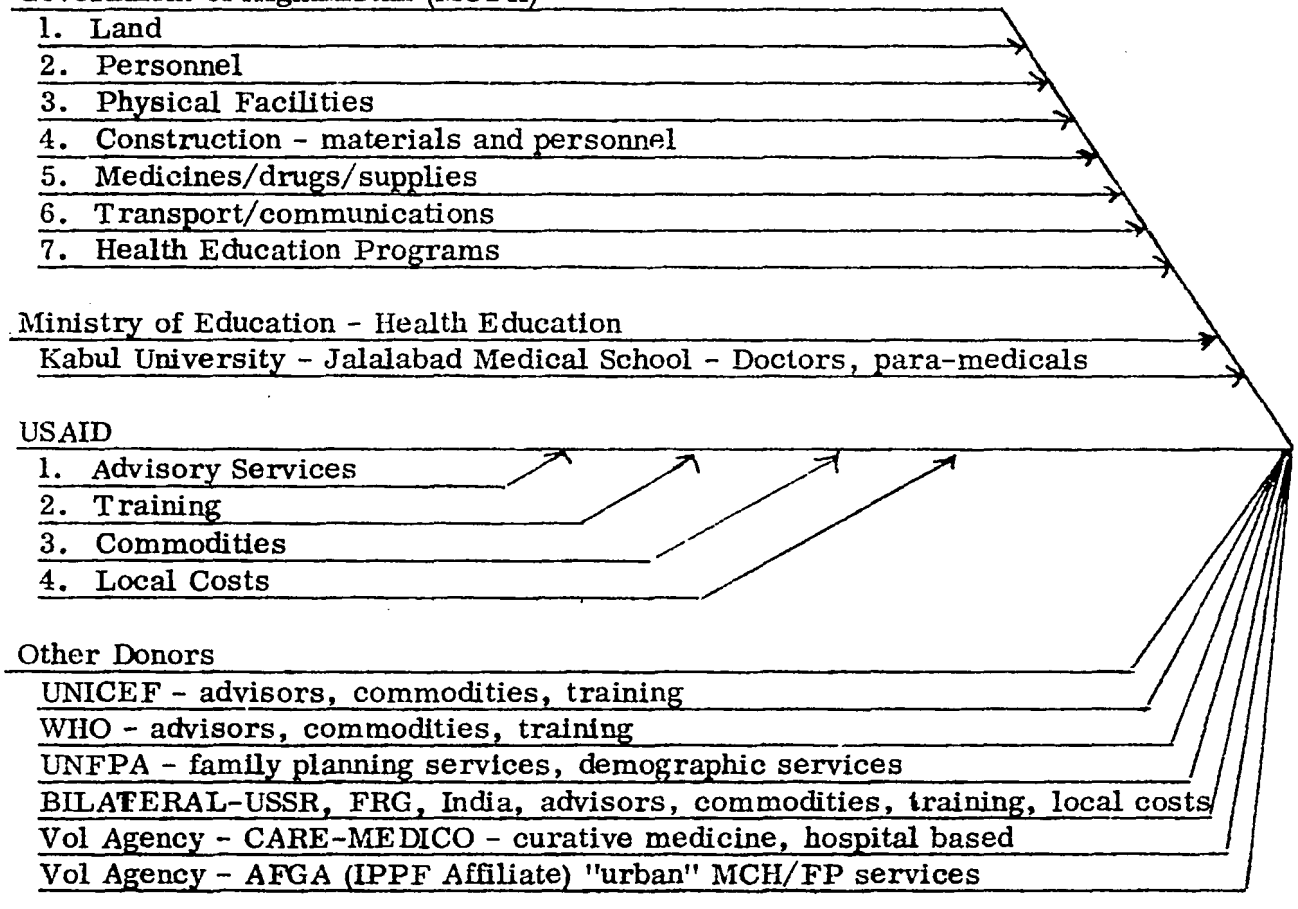
The execution of the project will require the horizontal coordination of the Presidencies of Preventive Medicine and Basic Health Services and with planning linkages to training institutes such as the auxiliary nurse-midwife school, the Public Health Institute, and the Medical Faculty of Kabul University. In addition, the project will require the daily coordination of the two aforementioned Presidencies with the Construction and Engineering Division for site selection and construction scheduling and the Presidency of Administration for budget allocation, contracting, procurement, and personnel assignments. This Kabul-based MCPH organization will be vertically linked through regional administrative and supervisory units to the individual BHCs. USAID assistance, both advisory services and participant training, will be applied to the key interfaces among Presidencies and Departments, and to such training institutions as the ANM school. The core of USAID assistance will be provided to the Presidency of Basic Health Services.

5. Responsibility for Inputs.

In general, the MOPH will bear the cost of personnel assigned to BHCs, the supply of expendable drugs and materials, more than 25 percent of construction costs (since MOPH overhead and supervision costs are excluded from FAR reimbursement), and the partial cost of furnishings and equipment. UNICEF contributions will be made for drugs, some BHC equipment, vehicles and potable water supplies. USAID-financed inputs will include advisory services for personnel management, logistical systems, auxiliary nurse midwife training, in-service and overseas training of MCPH staff, the design of the AHDS models, 75 percent of the direct costs of construction and local operating costs for BHC rental. In addition, USAID will provide limited commodity support primarily for in-service training and contraceptive supplies in the BHCs.

Figure 1

PURPOSE ACHIEVEMENT



STATUS
End of Project
Phase I

1. Basic Health Centers provide service to 830,000 people:
   A. Each operational BHC provides: diagnosis; effective treatment for 80% of diseases presented; referrals to provincial hospitals; FP education and service; midwifery and MCH service; health education for nutrition and sanitation; and vaccination service by ANM, vaccinator and sanitarian.
   B. Average daily BHC attendance 50 patients.
   C. The proportion of women and children seeking health services increasingly corresponds with their numbers in target population.
2. Two or more Alternative Health Delivery Systems of proven effectiveness developed and capable of being replicated at affordable cost.

D. SUMMARY FINDINGS

1. Social.

In the Social Analysis section of this PP we find that the beneficiaries of the project will be overwhelmingly rural and that by the end of Phase I (FY 78) there will be more rural people receiving modern health services than urban. More significantly, rural females will receive services in proportion to their number in the population. Accordingly, the expected impact on the health status of rural females will be relatively much greater than for the male population, since it is the latter which has had substantially greater access to traditional and modern health services to date. The implementation of the alternative health delivery system models will require the participation of rural people both in client and practitioner roles. Historically, there is very limited evidence of sustained and productive interaction between central government and rural people, especially where the active participation of the people is a prerequisite to project success. Thus, the design and implementation of the AHDS models must proceed carefully with due regard for the conservative milieu of the rural populace.

2. Financial.

The Mission concludes from its Financial Analysis that the GOA has and continues to manifest its commitment to improving the health of the Afghan population as evidenced by the growing allocation of ordinary and development expenditure to the health sector. The recurrent cost of an expanded basic health infrastructure, upon the completion of Phase I, can be borne by the GOA. Such expenditure will be small relative to domestic revenues, total ordinary expenditure and GDP. Furthermore, the financial cost per patient served upon the completion of Phase I will be acceptable on conservative assumptions and might be termed "low cost" on more liberal assumptions of patient load and the useful life of structures. The Financial Analysis reveals the substantial difficulty of designing alternative health delivery systems which both reach beyond the service radius of the BHCs and are "low cost." Whereas the BHCs will be located, by definition, in areas of higher population density, the AHDS models will operate beyond these concentrations of population and, thereby, increase the cost of delivering even minimal service. Beyond, say, about 75 percent population coverage, the cost of service delivered through any system will be expensive.

3. Economic.

The Mission did not undertake a conventional economic benefit/cost analysis or a cost effectiveness analysis based upon an academic, theoretical model for the reason that the statistical base in Afghanistan is so weak and the typical set of operative assumptions so subject to manipulation that virtually any B/C ratio could be achieved. Reasoning both by experience and intuition, the Mission concludes that the Phase I project will likely result in lower birth rates, lower death rates, and improved health especially among females. The short-run effect may be a small increase in the population growth rate, more pressure on available food supplies and per capita income. However, in the short run, there should also be a redistribution of real income from urban to rural residents. In the long run, the services provided through Phase I Basic Health Centers should cause lowered fertility and lower population growth with consequent improved individual and family well-being and higher yields on human productivity. Over the assumed economic life of the project, 30 years, the computed economic cost per patient served may range (depending on assumptions) between $U.S. 0.20 and $U.S. 0.29 or what we term "low cost."

E. PROJECT ISSUES.

The Phase I project addresses the most important health issues in Afghanistan today: the provision of health service to the rural population; the provision of services to females; and the first experimentation to provide health services to the rural population who will, for the foreseeable future, remain beyond the reach of any modern health facility. The following subsidiary issues are ones which will be analyzed, discussed and hopefully resolved during the course of the Phase I project.

1. Free Medicines and Drugs.

Currently it is the policy of the GOA to provide all health services free of charge. This includes not only the services of all MOPH personnel but drugs, medicines, dressings and any other supplies necessary for health care. As of this date, the full financial implications of this policy have been mitigated by various conditions including short supplies of drugs and materials and the Ministry's incapacity to distribute such supplies to Basic Health Centers. If, as the GOA apparently intends, this is to remain the policy and one which is put into full practice, then the resource allocations among GOA Ministries must change and the MOPH's share be increased. The USAID recommendation to the MOPH to date has been that the beneficiaries of services should bear some part of the cost.

The Management Sciences for Health (MSH) Parwan study indicates that people are willing to allocate, and do allocate, a significant share of their incomes to private medical services and the purchase of medicines. Various programs have been studied and specific reports on some of them have been submitted to the MOPH by the MSH team. Among those to be considered are: prepaid health insurance (a "health stamp" scheme); fees for services; and/or charges for drugs. The resolution of this issue will be described in any Phase II Project Paper.

2. Conflict with Non-Project Activity.

The MOPH is proceeding on a parallel track with the Phase I project to construct about 70 Basic Health Centers including a number which are only partially complete after one to three years of start and stop construction. The primary contractor is the Helmand Construction Company (HCC), formerly the Helmand Arghandab Construction Unit (HACU). On the one hand, it is by no means clear that HCC can actually accomplish the Ministry's construction plans for the reason that the company is heavily committed to the Central Helmand Drainage project, the IBRD-financed Kunduz-Khanabad irrigation scheme, and an ADB-financed road project in the Helmand Valley. On the other hand, and assuming that HCC can accomplish the construction, it is not clear what priority this "non-project" construction will assume within the Ministry with respect to staff assignments, in-service training, logistical support, etc. Given the GOA's cabinet level commitment to the USAID-assisted Basic Health Services project, the Mission assumes that first priority will be on the Phase I joint project. However, if this is not the case, Phase I implementation may well be slowed and the rate of USAID commitment to fixed amount reimbursement for new construction decelerated. The possible conflict between project and non-project activity within the Basic Health Services Presidency will be measured, assessed and recorded through the Mission's monthly reporting system for the Project Performance Tracking network.

3. Integration of other MOPH Services.

This Phase I project does not integrate the services and personnel of the nearly autonomous organizations within the Ministry of Public Health for smallpox immunization and malaria control. At the present time, it is simply beyond the capacity of the MOPH to integrate these relatively well-developed institutions into the activities of the new developing Presidency for Basic Health Services. Depending on the degree of successful implementation of Phase I, this issue may be studied and addressed in a subsequent Phase II project.

PART 2. PROJECT BACKGROUND AND DETAILED DESCRIPTION

A. BACKGROUND

1. The Problem (Needs)

Afghanistan is, by most all international measures, among the 25 least developed nations. Not unexpectedly it shares the problems of these least developed countries.

UNICEF-WHO Joint Committee on Health Policy has summarized the nature of the problem and possible solutions:

> "Despite the efforts made over the years by many governments and by WHO and UNICEF to elaborate, enlarge and adapt their policies and despite the fact that health services have been greatly strengthened in many developing countries, the basic health needs of populations are not yet met in a satisfactory way. It is estimated that in many countries less than 15 percent of the rural population and of other underprivileged groups such as slum dwellers, nomads and people in remote regions have access to health services. This situation is made even more serious by the fact that rural and underprivileged people are not only particularly exposed, but also very prone, to disease. A hostile environment, poverty, ignorance of the causes of disease and of protective measures, lack of health services or inability to seek and utilize them are all factors that may combine to produce this sorry situation.
>
> "To meet effectively the main needs of underprivileged populations, which represent about 80 percent of the people in less developed countries, health services should actively seek out the persons concerned; learn their needs and desires, and protect, treat and educate them. Unfortunately, the strategy so far adopted by many developing countries of modeling their health services on those of developed countries has not been conducive to serving needs as described above and has therefore failed. Broadly, it has

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* "WHO/UNICEF Joint Study on Alternative Approaches to Meeting Basic Health Needs of Populations in Developing Countries" Twentieth Session, Geneva, 4-6 February 1975.

tended to create relatively sophisticated health services staffed with well qualified personnel, which it was hoped to expand progressively as resources increased until the entire population was covered. This has not occurred. Instead the services have become predominantly urban-oriented, mostly curative in nature, and accessible mainly to a small and privileged part of the population.

"The relative emphasis on special disease programmes may also have hindered the development of basic health services over the past 25 years. The enthusiastic application of new knowledge and technology has not always achieved the expected goals, and some of the consequences have been untoward. In sum, history and experience show that conventional health services, organized and structured as an emanation of "Western-type" or other centralized thinking and mechanisms, are unlikely to expand to meet the basic health needs of all people. The human, physical and financial resources required would be too great; the necessary sensitivity to the specific problems of rural or neglected communities would rarely be attained."

The WHO/UNICEF statement, in its entirety, is applicable to Afghanistan. Afghanistan, however, as few other developing countries has the problems in unusual extremes. Its rural people are isolated by the forbidding barriers of desert and the soaring Hindu Kush mountains. The number of its nomads is large, approximately 10 percent of the population. Its urban poor are "urban" only in a demographic sense, having neither opportunities of upward mobility through modern industry, nor having those urban amenities such as protected drinking water and adequate sanitary waste disposal.*

The WHO/UNICEF statement continues:

"It is therefore essential to take a fresh look at existing priority health problems and at alternative approaches to their solution. This is clearly not just a question of applying a little more technical knowhow. In some situations drastic or revolutionary

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* From "The Kabul Times" September 4, 1975: "The 14 story building which (when built) will be the talle 'n the country ...." ".... the needs of the Kabul citizens as regard potable water will be totally met within five to six years."

changes in the approach to health services might be required; in other, at least radical reforms. The approach should be linked to human attitudes and values, which differ in different communities, and should require a clear motivation and commitment on the part of the people who have the knowledge and the political and/or economic power to introduce change."

The WHO/UNICEF study states that a promising approach would include the following characteristics:

"1. It provokes:

- adequate immunization
- assistance to mothers during pregnancy and at delivery, postnatal and child care, and appropriate advice to countries that accept family planning policy
- safe, sufficient and accessible water, adequate sanitation, and vector control
- diagnosis and treatment of simple diseases; first aid and emergency treatment; facilities for the referral of serious conditions
- other services that may be considered in the light of local conditions .... to meet basic health needs

"2. It provides at least 80 percent health coverage for such socially or geographically remote populations as villagers, nomads, or peri-urban and slum dwellers.

"3. It is applied, or promises to be applicable within a reasonable span of time, in a country of very limited resources."

2. Health Status and Perceived Health Problems

Demography

Survey data provide consistent impressions of major demographic and health parameters and underscore Afghanistan's position today as one of the least developed countries in the world. While inclusion in this category inevitably raises the general spectre of high birth rates, high but decreasing death rates, and resulting high growth rates, Afghanistan has recently developed the data necessary to focus reasonably precisely on these parameters. Large-scale national surveys by the GOA and specifically targeted studies under the MOPH, indicate birth rates as high as 50 per thousand,

and death rates ~~of over~~ 30 per thousand (with rural deaths occurring at about twice the urban level), with particularly punishing effects on women and children.

Maternal mortality has been variously estimated from 64 to as high as 200 per thousand with even the lower (and perhaps more accurate) estimates 100 times the level encountered in the United States and Sweden.

The mortality experience among children reveals rural infant mortality rates closely approximating 200 per thousand live births, and deaths between the first and fiftieth year similarly elevated.

Causes of Death and Disability and Rural Afghanistan's Perceptions of Health Needs

The litany of health problems associated with the mortality data outlined above would also be predicted from the experience of similar developing country problems, and such predictions are largely borne out by Afghan examples. While there is some variance in rank order in the first year of life and the years one to five, all studies confirm that diarrheal disease, other infectious and respiratory diseases, measles and nutritional deficiency are major contributing factors in childhood deaths, which in turn is the predominant category of mortality in the Afghan scene today.

Of equal importance to the epidemiologic data summarized above, are the perceptions that rural Afghans have as to the causes of death in this age group. The recent MSH village health survey presents an important view of rural health problems.

"Findings of Survey

"Households interviewed had an average size of slightly over 6 persons, with a large percent of members of households (almost 50 percent) being under 15 years of age. Survival rates of women are much lower than for men; past the age of 50 there are 1.5 males for every female.

"Women approaching completed fertility (age 35 - 44) have an average of 7.1 live births, approximately 30 percent of whom died. The overall mortality rate for the sample population in the previous year was 20.1/1000, 68 percent of which were children under five years of age. Sixty-three percent of these childhood deaths were attributed to either measles, diarrhea or pneumonia.

"Over one-third of all individuals in the households studied had been sick in the last three months; almost 60 percent of these were still sick when interviewed. Body pains was the most frequent complaint mentioned, accounting for 35 percent of the total; upper respiratory infections being next with almost 15 percent prevalence. Diarrhea was not frequently mentioned, perhaps due to the fact that the interviews were conducted in winter. Women over 44 reported a prevalence of illness almost twice as great as that of men.

"Respondents perceived the "most serious illnesses" to be pneumonia, diarrhea, dysentery and measles, and their most "serious health needs" to be medicine, doctors and hospitals. Almost 50 percent of all of those who had died in the previous year had not sought any treatment. Of those reporting an illness in the last three months, 36 percent had received no care. Those who did use some care demonstrated a preference for modern services - doctors, pharmacies, BHCs, hospitals - over traditional services. An exception is the Mullah - 54.8 percent of all households having used his services in the previous year.

"The average amount of money spent for a household's health services in the previous year was 918 Afs. Thirty-seven point five percent of this was used to purchase medicines and another 20 percent was allocated for the use of mullahs or shrines. The amount spent on health services accounted for 6.8 percent of the total average household income.

"BHCs are viewed as an important source of health care by the rural Afghan. 60.5 percent of the sample expressed the view that the BHC provided the best care when sick. The vast majority of BHC users felt that the services and personal attention they received was favorable, although a number expressed concern over the fact the BHC role in food supplementation often interfered with the provision of health services to those who needed it.

"Almost all (91 percent) of rural women report that the maternity services which they have available are not satisfactory. There is also an indication of widespread lack of knowledge of child rearing practices, especially as related to nutrition. While breast feeding is extended (up to 24 months average), solid foods are not introduced into a child's diet early enough to

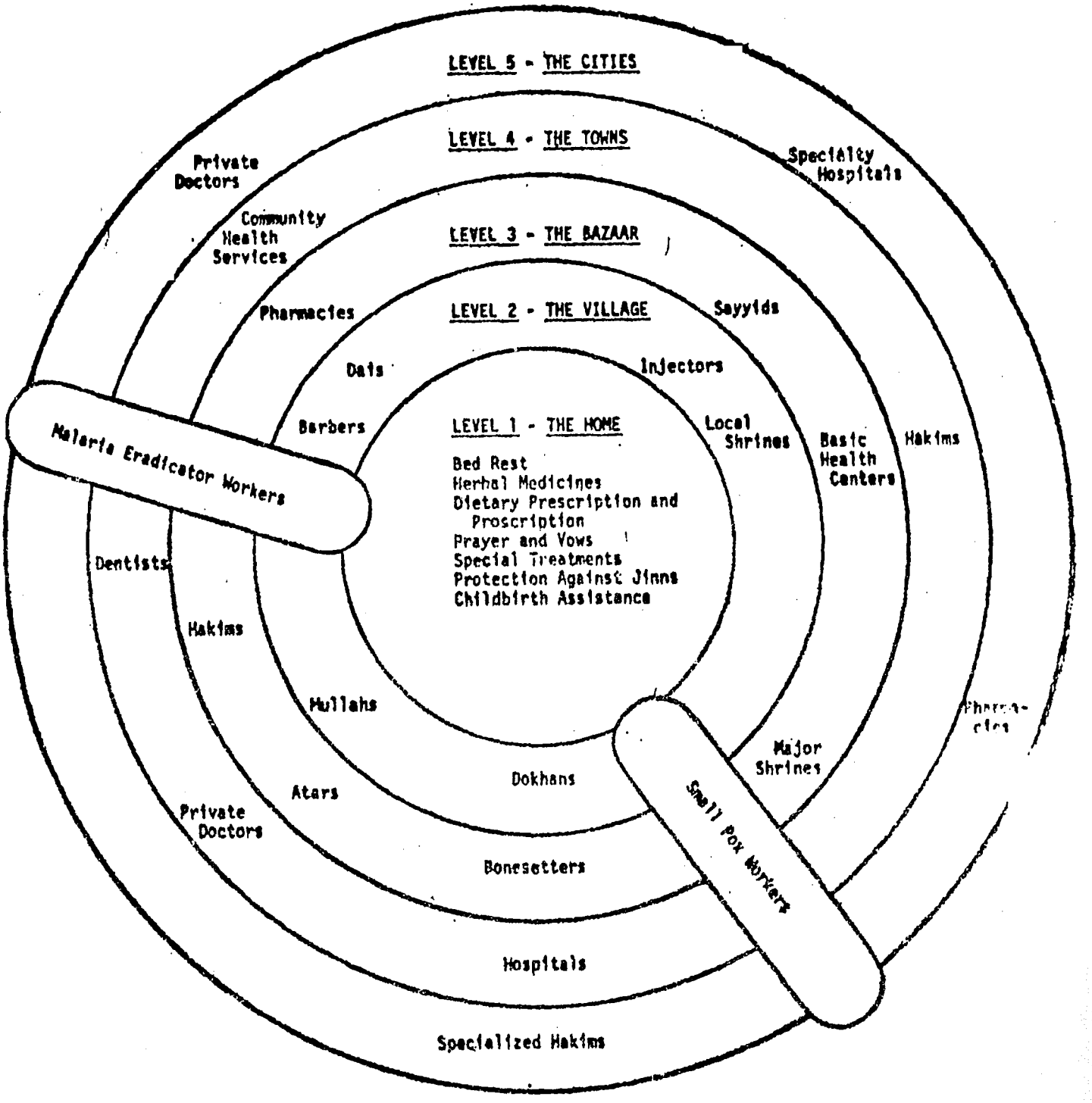
properly augment the nutrition for mother's milk. Similarly, the types of foods used at weaning tend to indicate insufficient diets for children in weaning. Nutritional assessment, using arm circumference measurements, points to severe nutritional problems, especially among those at age of weaning - age 2 to 3."

3. The Afghan Health System - Cultural and Organizational Perspectives.

One approach to the analysis of the health system in rural Afghanistan is to examine the actions and options available for a village at home faced with a perceived health problem. The attached figure (Fig. 2 from the MSH Village Health Study) suggests in pictorial form the successive layers of services which may be employed in the health care seeing process, from the home to the villages, the bazaars, the towns and finally the cities. The large majority of health care actions undoubtedly arise in the home and are largely beyond the present reach of the health care organization summarized in the following diagram.

Figure 2

Overview of Afghan Rural Health Systems



Dais - women specialized in the delivery of babies.
Mullahs - religious leaders
Dokhans - small shops (Dokhandars - shopkeepers)
Shrine - typically the burial site of a pious ancestor
Hakim - a traditional medical practitioner, often Hindu, who utilizes procedures which descend from the Unani medical tradition of India and Arabic medical traditions from the West.
Atars - shopkeepers or roadside vendors who specialize in herbal medicines
Sayyids - holy persons who claim to be descendants of the Prophet Mohammed.

4. Modern and Traditional Medicine

The first medical college was founded in 1932 by the royal decree of Nader Shah and was placed under the guidance of a Turkish physician, Dr. Rafiq Kamel Beg. In 1948-49, 83 Afghan and 23 foreign physicians were listed in the Afghan General and Commerical Directory.

Since the establishment of the two Colleges of Medicine (a second one was founded in 1963) approximately one thousand five hundred doctors have graduated, of which number 645 are now employed by the Ministry of Health and approximately 425 by other GOA agencies, e.g. Ministry of Defense, Kabul University Medical School and the Interior Ministry. Thus, 1,070 doctors give Afghanistan a physician/population ratio of 1:11,200.

The numbers of other health personnel are also low: nurses 729; auxiliary nurse-midwives ~~261~~; and sanitarians 412.

The great majority of these medical personnel are located in Kabul and the few other urban areas; however, the recent decision of the MOPH to assign all future medical school graduates -- approximately 100 yearly -- to two years of service in the rural areas will help to remedy the situation.

The majority of the population, therefore, depend on the practitioners of the traditional folk medicine and resort to the doctor of modern medicine when no other traditional options remain. This can be attributed to several factors:

1. The scarcity of medical doctors, necessitating the traveling of long distances to obtain their services.

2. The relatively higher cost of the services and drugs of modern medical doctors.

3. Some unfamiliarity with the mistrust of modern medicine.

4. Unwillingness to alter cultural behavior in submitting to physical examinations and dealing with doctors who rarely come from the communities in which they practice.

The State of the Art of Traditional Medicine

Unlike the traditional herbal medicine of some countries, e.g. Pakistan, India, Japan and China, traditional medicine in Afghanistan today is not institutionalized, officially recognized or controlled. There are no schools of herbal medicine and the practice is passed from master to apprentice, the majority of whom are illiterate. These realities and the popular notion that illness can have either a natural or supernatural etiology have blurred the distinctions between medicine and magic, and priest and physician.

5. Organizations and Recent History of the Government Health System

During the last years of the previous government, it became clear that many factors were interfering with the MOPH ability to provide access to health care to the people, including the organization and management capability of the MOPH itself, and the widespread lack of female personnel necessary to serve Afghan women.

Three initiatives pertaining to rural health were sustained and strengthened by the new Republic Government following the 1973 revolution; the organization of Basic Health Services within the Ministry, the improvement of the Ministry's management capacity to implement rural health activities, and the training of female auxiliary personnel.

Organization of Basic Health Services

Originating from an effort by the Rural Development Department to provide rural health facilities, the concept of BHCs became firmly established in the MOPH in accord with the recommended policy guidelines of international agencies including UNICEF and WHO advisors who have been involved for more than two decades in the effort. To date, the Ministry commitment to rural health is evidenced most clearly in the continued ascent of the Basic Health Services activity to its present status as a Presidency and the largest activity under the Rank I Presidency of Preventive Medicine. The goal of the MOPH is to establish a BHC in every Minor Civil Division (MCD) of the country by 1983, providing roughly one center for every 20 to 30,000 people and potential practical direct success to perhaps one-third to one-half of the rural population. A large number of important tasks have been undertaken to give substance to this plan including:

A BHC Pilot Project in Parwan/Kapisa Province to test the practical limits of the BHC program to provide access to health care within the resources realistically available to the Government. Its results included the facts that: (1) services could be substantially increased by reorganization of staff and supplies; (2) paramedical personnel could adequately handle the majority of the problems presented to health centers; (3) redesigned lists of supplies could meet a large fraction of the health needs within the expanded budget provided by the MOPH; (4) BHC personnel responded favorably to the training and supervisory support provided during the project, and noticeable regression in work output was observed when supervision decreased.

Work Manuals. Detailed job descriptions with technical and administrative guidelines were developed for each health worker in the BHC using an in-service training approach to begin to remedy the lack of guidance available for rural workers faced with complex tasks and minimal training and supervision.

Regionalization. Recognizing the impossibility of implementing decentralized programs effectively from a central ministry, the MOPH is leading the GOA effort to regionalize administration. The first two of six regions were staffed in 1354 with competent, senior MOPH physicians. In Phase I, four Regional Offices will have become operational.

Division of Authority/Responsibility at Senior Levels in the MOPH. A significant amount of confusion and internal ineffectiveness in program decisions in the earlier years of the expanded BHC effort resulted in the Minister's direction to divide clearly program implementation authority and responsibility for supplies and programming.

Management for Rural Health Services

Recognizing the importance and complexity of the task involved in improving rural access to health care, the MOPH in 1973 requested AID assistance in providing Management Support for Rural and Family Health Services. Management Sciences for Health (MSH) was selected as the contractor, and a team of consultants has been working with the Ministry on a wide range of tasks essential to the success of rural health improvement. These tasks began with an initial analysis of MOPH operations and procedures, and a joint work plan to tackle priority tasks. These have included the activities outlined above and such additional tasks as:

materials and personnel management to improve MOPH capability to procure, store and supply the BHC system and to know where and what skills reside in the MOPH manpower pool;

study of health needs, practices and resources as perceived by villate residents (Parwan model), a cooperative practical survey of rural health and family planning priorities, an important reformation element for MOPH consideration of how the BHC system can meet rural needs and what supplementary efforts are needed beyond the BHC system;

planning of Alternative Delivery System experiments, to reach beyond the BHC system to the majority of rural Afghans;

work with Preventive Medicine personnel to plan and implement the training team/supervision concept as the interface between MOPH plans and policies, and the BHC workers in the field;

support of the MOPH budgeting and planning process, to improve resource allocation among MOPH programs;

analysis of the economic and health implications of the Afghan drug procurement and use process, resulting in a revised National Formulary, consideration of a national procurement policy and nationalized medications and packaging for use in the BHC system and the Alternative Delivery System experiments; and

consideration of a national multiple antigen immunization plan.

Training of Female Auxiliary Personnel

Redressing the acute imbalance between the health needs of rural Afghan women and the personnel available to deal with them is the purpose of the MOPH initiative, undertaken in 1971 to train Auxiliary Nurse Midwives.

The Auxiliary Nurse Midwife (ANM) school was established in Kabul in 1971. Prior to USAID participation in 1973, the school had graduated 48 young women, and in 1975 a second class of 28 was graduated. In January 1976 a third class of 25 graduated. A new class of 75 or more will begin the 18-month program in April 1976. Of those graduated before 1976, 41 are currently assigned to BHCs and 35 to other MOPH clinic facilities. The UC/SC, through a USAID contract, provides two nurse-midwife education advisors to the ANM school. Special training courses at the UC/SC campus have been given to three members of the ANM faculty and another six persons are scheduled for this training beginning in April 1976.

The school in Kabul presently occupies temporary buildings which restricts the numbers of students which can be accepted. Early in 1976, a new facility -- school and hostel -- is scheduled to open, and its facilities will permit an expansion to 150 students, i.e., a new class of 50 each semester. This will enable the graduation level to reach approximately 100 per year beginning in 1977. USAID has assisted the MOPH with the construction of the new facility by providing $200,000 of which $150,000 has been granted and an additional $50,000 is to be granted on the successful completion of all construction.

B. PROJECT CONCEPT AND DESCRIPTION

1. Introduction

We suggest that the best understanding of the BHS Phase I project may be gained by a thorough review of the Project Performance Tracking (PPT) network presented in Part 3., Implementation Arrangements, and within the context of the logical framework matrices presented in the pages which immediately follow this introduction. This is so because a log frame is a static representation of a project at fixed points in time, e.g. a schedule of necessary goods and services at the input level and a set of conditions to be achieved by the end of the project at the purpose level, whereas the PPT network represents the flow or process of a project on a time continuum. Accordingly, and in an effort to limit the number of redundant passages in this paper, we have segregated our discussion of inputs into two parts. In the section immediately following the log frame matrices we discuss input to output transformations which are not a part of a continuous implementation process. Participant training, commodity inputs and "other costs" for MOPH staff per diem fall into this category. In Part 3, immediately following the PPT network, we discuss training from the point of view of process, the transformation of advisory services into operating systems and the provision of, and arrangements for, local cost financing for the rental and construction of BHCs.

2. The Phase I Logical Framework

LOG FRAME

BASIC HEALTH SERVICES

Goal	Indicators				Verification	Assumptions
		Current Health (1976) Indicators for Children Under 5		1982 (End of Afghanistan's Seven-Year Plan)		
		Morbidity	Mortality	Morbidity	Mortality	
To improve the health of Afghan population not now having access to effective health education and services due largely to circumstances of residence, poverty, sex and age. These are mostly the rural people who comprise 85% of the population.	Malnutrition	50%	5%	40%	5.0%	BHC site specific surveys - client records (e.g. weight charts) - clinic summary records. MOPH reports. Site visits by MOPH and USAID project personnel Use prior year surveys and 1978 BHC data as base line for comparisons.
	Measles (excluding epidemics)	10.8%	2.7%	10.8%	2.4%	GOA continues to give priority to achievement of national health goals. Epidemics are contained. No major food shortages occur.
	Pneumonia (acute respiratory disease)	26%	1.3%	26%	1.0%	
	Diarrhea/ Dysentary w/Dehydration	75%	7.5%	10%	1.0%	
	Family Planning			1976	1982	
	1. Contraceptive Acceptors			1%	10%	
	2. Additional Children desired at parity of two.			5.5%	3.0%	

LOG FRAME

BASIC HEALTH SERVICES

Purposes	End of Project Status (EOPS)	Means of Verification	Assumptions
BHS			
To provide basic health services, with emphasis on services for women and children, to 830,000 persons living in fifty Minor Civil Divisions within four of Afghanistan's six Health Regions.	A. Each operational BHC provides: (1) diagnosis (2) effective treatment for 80% of diseases presented (3) referrals to provincial hospitals (4) FP education and service (5) midwifery and MCH service (6) health education for nutrition and sanitation (7) vaccination services by ANM and vaccinator. B. Average BHC attendance 50 patients per day. C. The proportion of women and children seeking health services increasingly corresponds with their numbers in the target population.	A and B. Clinic records/reports and MOPH/USAID site visits. C. Survey of villages in BHC catchment areas, and demographic "profile" estimated on basis ADS/SUNY data compared with client record data.	MOPH implements rational medicine/drug policy and insures inventory levels at BHCs. Donor contributions are delivered on schedule. Cultural constraints, especially those on women, will not prevent attendance at clinics.
AHDS	AHDS	AHDS	AHDS
To provide two or more Alternative Health Delivery Systems (AHDS) which when widely replicated will provide a minimal health service for those persons who will not have reasonable access to a BHC.	Systems of proven effectiveness developed which are capable of being replicated at affordable cost.	MOPH/USAID evaluations of AHDS.	Villagers receptive and willing to participate in AHDS model(s)

LOG FRAME

BASIC HEALTH SERVICES

Outputs	Indicators	Means of Verification	Assumption
BHS			
1. Four (4) operational regional health offices supporting 50 BHC and AHDS experiments.	1 and 2. BHCs operational in project areas as follows: End FY 76 - FY 77 - FY 78 Rank I - 4 - 4 Rank II - 13 - 42 Rank III - 1 - 4	Verification of all output factors will be based on on-going monitoring by personnel of the MOPH and USAID. Formal verification of each output indicator will be through regularly scheduled joint MOPH/USAID evaluations. Cite specific verification of outputs will be made through application of the USAID Fixed Amount Reimbursement (FAR) procedures.	BHS institutional and personnel motivations are sufficient to sustain required effort. New concepts introduced in training programs are accepted.
2. 50 operational BHCs.			
3. ANM School operating at optimal level.	3. A minimum of one ANM on duty at each BHC in project area.		
4. BHC personnel trained and assigned.	4. End FY 76 - FY 77 - FY 78 -Physician or Sr. Nurse - 18 - 50 -ANMs - 18 - 50 -Paramedical Pers - 36 - 100		
5. BHC supply systems expanded.	5. Drug (medicines) formulary for BHC adequate for illnesses treated, and inventories maintained systematically.		
6. Client record system operating.	6. Periodic Provincial, Regional and Ministry summary reports based on data provided by BHCs.		
AHDS	**AHDS**	**AHDS**	**AHDS**
1. Two or more AHDS designed and approved for testing.	1. Two or more AHDS tested.	2. A. MOPH personnel records (absolute numbers and turnover rates) B. MOPH/USAID records and visits (appropriate content, need for retraining) C. Worker records (if literate) survey otherwise. D. End users served by AHDS systems with required minimal health supplies.	Same as above.
2. Elements of one or more AHDS demonstrated effective and financially and administratively feasible.	2. These elements are: A. Ability of MOPH to recruit workers B. Training courses developed and held C. Significant proportion of target population in contact with AHDS workers. (This will be quantified more precisely in the model designs.) D. Functioning supply system.		

LOG FRAME

BASIC HEALTH SERVICES

Inputs	Indicators				Means of Verification	Assumptions
	Year 1	Year 2	Year 3	TOTAL		
1. Construction	$ 302,260	$ 584,760	$1,711,130	$ 2,598,150	1. ProAgs, PIOs, Contracts	1. All inputs are made available by all project participants, in the kind, magnitude, and time needed for scheduled project implementation.
- Buildings	127,500	387,500	1,630,000	2,145,000		
- GOA	(89,250)	(96,875)	(407,500)	(593,625)	2. MOPH budgetary allocations	
- USAID	(38,250)	(290,625)	(1,222,500)	(1,551,375)		
					3. Other donor budgetary allocations	
- Water	32,500	55,000	22,500	110,000		
- GOA	(6,500)	(11,000)	(4,500)	(22,000)		
- UNICEF	(26,000)	(44,000)	(18,000)	(88,000)		
- Land (GOA)	25,000	25,000	-	50,000		
- Tech Support (GOA)	117,260	117,500	58,630	293,150		
2. Equipment	140,000	90,000	15,000	245,000		
- GOA	15,000	45,000	15,000	75,000		
- USAID	-	20,000	-	20,000		
- UNICEF	125,000	25,000	-	150,000		
3. Rent	1,880	13,440	4,680	20,000		
- GOA	470	3,360	1,170	5,000		
- USAID	1,410	10,080	3,570	15,000		
4. Outreach Projects (USAID)	-	40,000	21,000	61,000		
5. Supplies, Repairs	19,700	79,050	159,000	257,750		
- GOA	5,700	31,800	71,500	109,000		
- USAID	12,800	43,200	80,000	136,000		
- UNICEF	1,200	4,050	7,500	12,750		
6. Personnel	607,800	732,800	610,900	1,951,500		
- GOA	47,200	158,300	301,000	506,500		
- USAID	553,200	553,200	276,600	1,383,000		
- UNICEF	7,400	21,300	33,300	62,000		
7. Participants (USAID)	220,000	170,000	35,000	425,000		
8. Sub-Total	1,291,640	1,710,050	2,556,710	5,558,400		
9. Contingency	24,040	66,395	247,875	338,310		
- GOA	14,400	16,200	61,800	92,400		
- USAID	5,740	43,595	183,375	232,710		
- UNICEF	3,900	6,600	2,700	13,200		
10. Inflation Allowance	-	35,275	173,900	209,175		
- GOA	-	19,500	70,100	89,600		
- USAID	-	12,000	99,000	111,000		
- UNICEF	-	3,775	4,800	8,575		
11. GRAND TOTALS	$1,315,680	$1,811,720	$2,978,485	$6,105,885		

See Part IV - Financial

3. Discussion

Project Inputs to Outputs

The inputs necessary to the achievement of outputs and purposes are itemized in financial reporting format in the preceding log frame. The primary inputs and outputs of USAID and the GOA are discussed below. Other donor inputs are discussed in ~~Part 4, Br 4.~~

Training

The Phase I training activities are extensive at each hierarchy. Special consideration is given to the institutionalization of in-service training at all levels. The longer term, graduate level training programs are not directly related to Phase I, but to the longer term objective of building within certain offices of the MOPH the competence to sustain the program developed in Phase I and to administer the subsequent expansion of services to the rest of the nation.

Ministry of Public Health (MOPH), Kabul Personnel

Presidency of Coordination and Planning - Two new professional positions will be created in this Presidency. Two participant programs will be provided for Masters Degrees in Health Planning in the U.S.: 48 man-months

Division of Engineering - Ten new positions will be established in this division. The qualifications required will be BS in Engineering, Kabul University, for approximately three of these, and a higher secondary diploma from a technical school for the others. In Phase I, 10 persons from this Division will be provided participant programs for short to medium-term training in the U.S. (six months). Training will be in construction, construction supervision, buildings and equipment maintenance: 66 man-months

Presidency of Administration - Two new positions will be established. Non-degree, medium-term training in supply and transportation management will be provided in the U.S. for two persons: 24 man-months

Short-term training (accounting, inventory control, supply systems, etc.) will be provided for 12 persons: 48 man-months

Presidency of Basic Health Services (Presidency of Preventive Medicine) - Four new professional positions will be established in this Presidency. In Phase I, two participant programs will be provided for graduate level training in rural health administration: 36 man-months

Auxiliary Nurse-Midwife School (ANM), Kabul Faculty - Participant programs will be offered for medium-term, non-degree training in the U.S. for 12 faculty members during Phase I: 108 man-months

ANM Students - During Phase I, 310 students will be admitted to the 18-month ANM course in Kabul. Of these, it is anticipated 140 will graduate by the end of Phase I (September 30, 1978).

Regional and Provincial Personnel of the MOPH. Important to Phase I, but more important to subsequent maintenance of the BHS and AHDS programs in the Phase I area and to continued expansion in Phase II, are qualified personnel having extensive experience in the Regional and Provincial offices. We wish to provide for a few of the better qualified Regional and Provincial health officials the opportunity for short-term training both in the United States and in Third Countries. While the purpose of the training is to upgrade skills in rural health delivery, it should be recognized that the programs will also constitute quite a strong incentive for the BHS personnel outside of Kabul - personnel often unable to compete for such training programs. The amount of training scheduled for the U.S.A. is less than we would like; however, we consider it unlikely that we can find more than a few candidates who can meet the language requirements.

The training offered will be in public health delivery, both conventional clinic-based systems and alternative health delivery systems. The emphasis will be on practical training programs, preferably programs in which the Afghan will work with public health administrators on a one-to-one basis. In some instances, such U.S. training could be combined with academic courses of not more than one semester duration.

In prior years, through both the MSH and ANM projects, as well as through centrally funded projects, some Afghans have had short-term academic training, have attended workshops and have taken part in orientation programs in third countries. Iran is the most likely locale for third country training because of the common language. Turkey has been used for rural health orientation programs - The Etemisugt Model - and could be used again. During Phase I, USAID, the MOPH and the contractors will seek to identify other programs, especially alternative

health delivery programs, which are effective and have elements which could be adapted for Afghanistan. Thus, third country training would be in Iran, probably Turkey and hopefully in other near countries.

In Phase I, 24 man-months of short-term training is planned in the U.S. for Regional and Provincial personnel, i.e., four programs of six months each. Twelve man-months of training in third countries is planned, i.e. 12 one-month programs. In-country training is more extensive and is detailed in Table II.

Commodities

Audio-Visual Training Equipment

Each Rank I BHC will serve as a model clinic, Regional administrative headquarters and Regional training center. The training facility is to have two classrooms, each with a capacity of approximately 20 students. One of the rooms will be for lecture and seminar programs, the other for audio-visual instruction. Each Rank I training center will require recording machines and projectors (slide, film strip, overhead and motion picture), and a viewing screen. Video receivers will be provided to make use of the video tapes made in Afghanistan the past two years by MSH. Each training center will have a modest reproduction capability (mimeograph and spirit duplicator) for the production of simpler training materials, manuals and other materials. Spare parts inventories will be maintained and through the training program for personnel of the MOPH Construction and Engineering Division, equipment maintenance will be taught. These training centers should be operating throughout the year, providing in-service training to personnel both of the BHS system and of the AHDS systems. It may be noted that there exists in Afghanistan a film-making capability (Institute of Public Health, Ministry of Education and Afghan Films). Video tape production has begun and is expected to expand because trainees tend to relate more closely to films made in their own country, in their own language and featuring their own people in training roles. Until an adequate library of in-country video tapes is built up, imported instructional materials will be adapted.

Family Medicament and Contraceptive Kits.* In Phase I, two basic, related but somewhat different efforts are being made. One is the serving of 830,000 people through the clinic-based system in the project

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* PHA/POP, R. T. Ravenholt to PHA/POP Senior Staff Memorandum, September 26, 1975.

areas. The other is the development, through design, field testing and evaluation, of alternative modes of health delivery. In both these systems we can see a place for the medicament and contraceptives kit described in the cited memorandum. For Afghanistan, we would agree the kit could include antidiarrheal medication, antibacterial ointment, aspirin, condoms. It is likely water purification and vitamin tablets could be included. Some modest field surveys will be necessary to determine whether vaginal tampons could be included, and MOPH policy decisions need to be taken before oral contraceptives could be included in a medicament/FP kit. For BHCs, we would envision the ANM being the distributor of such kits. Either the BHC or the nearest village store could be resupply centers for the various items in the kits. Kit distribution to families would be part of the ANM's outreach duties. In the AHDS model areas where contact with BHCs will be difficult, it is more likely the village store would be the resupply station. We can obtain all but the contraceptives on the local market. Instructional materials can be developed in Afghanistan. The $3.00 per kit figure suggested by AID/W as an "ideal maximum" is probably reasonable for Afghanistan, but cannot be determined until we develop the kit. The AID/W proposal that kits be distributed free to families and then be resupplied at low cost through BHCs or village stores may be applicable in Afghanistan; however, this relates to the overall issue, discussed in Part 1 of this paper, of wholly free versus beneficiary-financed health care. The introduction, in Phase I, of medicament/FP kits could, in fact, serve to help resolve the issue, particularly if a resupply at cost to beneficiary system is accepted by the groups in the areas where the kits are first introduced. In Phase I we expect only to develop the kit (or kits), the resupply system(s) and demonstrations through a few BHCs and in one of the AHDS models that this is an effective, low-cost way to provide minimal health care.

Contraceptives. Based on extrapolations of ADS/SUNY data, the following may be regarded as maximum family planning acceptor targets for Afghanistan by 1978. (Average "acceptor years.")

Phase I Project Area, rural:	25,000
Non-project area, rural:	25,000
Afghan Family Guidance Association project area: urban and rural	100,000
	150,000

These figures for the rural areas are especially speculative; however, they are derived from the data presented in the Afghan Demographic Study Report (ADS/SUNY Report) and are current. The acceptor targets for the Afghan Family Guidance Association (AFGA) project are ambitious, but we think attainable. (See AFGA Clinic Expansion Project Paper, January 1975.) The ADS/SUNY Report states that of all rural women, only 1.6 percent have heard of a reliable method of family limitation, and of these informed 1.6 percent, only 16 percent have ever practiced a method. The ADS/SUNY Report also provides data on women who say they are receptive to family planning. For the rural women in the age group 14 to 44, this averages approximately 10 percent. The urban figure is more than double this, and the AFGA target figures are approximately 30 percent, the assumption being that the AFGA motivation programs will result in higher acceptance rates.

Experience in delivering contraceptive information and services in rural Afghanistan is extremely limited. USAID has for a few years provided the Ministry of Public Health with contraceptives for its existing medical facilities, but distribution has not been extensive. The AFGA contraceptives are delivered from the MOPH stocks.

In Phase I project area, special efforts will be made in health, nutrition and family planning outreach; thus, for initial planning we think we should have as a minimum contraceptive stock, enough to take care of 15 percent of the female population within access of the Basic Health Centers. We will, of course, continue to stock contraceptives for the AFGA program. In addition to these amounts, we will provide for some of the females who live in neither the AFGA nor Phase I project areas. While the MOPH family planning policy at this time is, by its own description "passive," i.e. services available on request, we expect during the coming year or two to see a more active policy, similar to AFGA's.

Urban Afghan women choose among the methods as follows: 64 percent pills; 12 percent condoms; 22 percent IUDs and 2 percent vaginals. For FY 77 and beyond, USAID plans, for procurement purposes, 70 percent pills, 15 percent condoms and 15 percent IUDs.

Other Costs

Other costs are in two basic categories, (a) rental and construction of physical facilities, and (b) personnel related, e.g. per diem and incentives. The former is discussed in Part 3.

All BHS personnel salaries will be paid by the MOPH. Through this project, USAID will provide approximately $36,000 for per diems of BHS personnel (Table 2). It is frankly acknowledged that USAID and the GOA have not resolved the entire issue of "incentives" which, in fact, are what the per diems are. It is not only a physical hardship but a financial hardship for MOPH personnel, residents of Kabul and the larger towns, to undertake field trips which are acknowledged to be essential if on-going BHC and AHDS training, supervision, and logistics controls are to be effective. In some programs over the years the GOA has met the need for incentives and does accept the concept. USAID experience in some of its new projects has been that essential, good quality personnel must be provided some incentives to remain in hardship areas or to carry out extensive field trips in such areas. In the development of this project, the GOA Cabinet reviewed and studied a "concepts paper" written by USAID and extensively reviewed by the MOPH and the Ministry of Planning. The language concerning "incentives" was carefully studied, and we have tentative agreement that "per diems" would not be counter to GOA regulations which now prohibit other kinds of incentives. In this Cabinet-approved concepts paper, the following language concludes the paragraph on incentives, "It would be understood that beginning in Phase II, a formula would be negotiated by which .... the GOA would begin to assume that portion of financial incentives provided by USAID in Phase I (e.g. 25 percent first year of Phase II, 50 percent second year, 75 percent third year and 100 percent thereafter)."

In Phase I, the per diems contemplated are modest, but insure that officials will not be out-of-pocket for expenses incurred on field trips. The major incentive for BHC personnel assigned to rural areas will be the housing provided at each center.

Table 2

Per Diems

MOPH (Kabul) Staff

BHS Presidency - Four officials 20 days per year at Regional, Provincial BHC. Monitoring and Evaluation per annum	20x4 = 80 man days 80xAfs 275 = 22,000	$ 398.20
Total Project:	398.20 x 2-1/4 =	$ 895.95
ADS Personnel (four) 40 days Site Training and Evaluation Per Annum	40x4 = 160 160xAfs 275 = 44,000	$ 796.40
Total Project:	796.40 x 2-1/4=	$ 1,791.90
Regional Health Officer 48 days per year at BHCs for supervision, monitoring, training Per Annum	48x4 = 192 man days @Afs 250 = $48,000	$ 868.78
Total Project:	x 2-1/4 =	$ 1,954.76
Provincial Health Officers 60 days per year at BHC - monitoring, inspection, training Per Annum	60x13 = 780 @Afs 200 =156,000	$ 2,823.53
Total Project:	2-1/4 =	$ 6,352.94
Training Teams (3 per team per region) 60 days per year at BHCs and ADS Per Annum	60x3x4 = 720 @Afs 200 = 144,000	$ 2,606.34
Total Project:	2-1/4 =	$ 5,864.27
In-Service Training programs at the Regional Centers for personnel of BHCs and ADS. 12 six-day training programs per year per region (12x6x4) 288 days 12 persons per session (12x288) 3,456 person- days training per year CY 1977 3,456 x per diem Afs 175=604,800 by 55.25=		$10,947.00
3/4 CY 1978 per diem		$ 8,210.00
GRAND TOTAL		$35,916.82

Significance at the Purpose Level

> "To provide basic health services, with emphasis on services for women and children, to 830,000 persons living in 50 Minor Civil Divisions within four of Afghanistan's six Health Regions.
>
> "To provide two or more Alternative Health Delivery systems (AHDS) which, when widely replicated, will provide a minimal health service for those persons who will not have reasonable access to a BHC."

The MOPH currently plans approximately 325 BHCs for Afghanistan. Estimates of the rural population which can be served effectively for such a system range from 30 to 50 percent, the MOPH favoring the latter figure. As noted elsewhere, BHC coverage is roughly defined as "the number of persons in an area who will perceive the BHC to be easily accessible and will utilize its services." The criteria for "easily accessible" are so many and varied that the term may well never be precisely defined. Geography, distances, transport, motivation, weather and quality of service are all factors. Experience will ultimately reveal whether the BHC network serves 30 or 50 or 70 percent of the target population during the Phase I build-up period.

The BHC network is essential for administrative, training, supervisory and other health delivery functions at the Minor Civil Division ("county") level of Afghanistan. It is essential as a component of the vertical system reaching up to the Provincial Hospitals. It is the smallest unit of the national system and the point at which an integrated health program begins to be effective for the larger numbers of rural persons. When Alternative Health Delivery Systems (AHDS) are tested and ready for national replication, it is likely the BHCs will provide almost all the back-up support -- training, supervision, supply and referral. When Afghanistan acquires the technology for effective immunization programs, e.g. the necessary cold-chain for measles, polio and other vaccines, the BHCs will be the "base camps" from which the rural population will be served. When malaria is finally contained and only maintenance programs are required, they will be the responsibility of the BHCs.

In Phase I, two or more AHDS models will be tested. We have identified, largely through information from the MSH Parwan study, two promising approaches: the Village Volunteer Health

Worker model and the Community Entrepreneur Model. Each is what its name implies, and neither is unique in international experience. Each will require special adaptation for the Afghan culture.

Sector Goal

> "To improve the health of the Afghan population not now having access to effective health education and services due largely to circumstances of residence, poverty, sex and age. These are mostly the rural people who comprise 85 percent of the population."

In Part 4.A., "Social Analysis" the target population and its characteristics are described in detail. Eighty-five percent or more of Afghanistan's population is rural. While most are disadvantaged because they lack access to the towns and cities which do have modern health services, it must be noted that the women are especially deprived. The men may freely elect to make the necessary journey to obtain services. The female is decidedly less free to do this. At best she will obtain such far away services indirectly - explaining symptoms to a male relative who must then describe them to a medical practitioner who prescribes the necessary treatment. Thus, the provision of a well-trained (18 months at the Kabul ANM school) female medical auxiliary at each BHC is seen as the single most important element of this project - services for women by women.

A discussion of the Indicators of goal attainment are in Part 3. D. "Evaluation and Baseline Data Collection."

PART 3. IMPLEMENTATION ARRANGEMENTS

A. INTRODUCTION

For the Phase I activities assisted by USAID, the MOPH has selected 50 Minor Civil Divisions (MCDs) of a total of 146 in 13 Provinces within four Health Regions. (Table 4) The catchment areas include 1,345 towns and villages within 3,206 kms. The calculation of 830,000 persons who will have access to these 50 Basic Health Centers was made by the MOPH using existing GOA data from MCDs and the new ADS/SUNY population density maps. Unfortunately, the ADS/SUNY population data are not aggregated either by Province or MCD and the population figures used by the MOPH are to be regarded as best estimates. The estimates are quite consistent with extrapolations which can be made using ADS/SUNY data as the base, i.e., 50 BHCs represent 15.4 percent of the total 325 planned for the nation; each BHC is expected to serve half of the population in the geographic/administrative are; 830,000 is roughly half of 15.4 percent. Further extrapolations and estimates would not appear useful, and for the purposes of the project we accept the MOPH figures. The non-settled population is not addressed specifically in this paper. The ADS/SUNY project provides only the estimate 1,100,000. This is a significant group. To learn more about them, their health characteristics and needs, will require attention of the personnel of each BHC. Training programs will include instructions for acquiring data for the nomads. The assumption that the nomads will seek attention from the BHCs in the areas through which they travel needs to be tested; if they do not utilize BHCs, then BHC motivational programs and alternative health delivery systems must be designed especially for this group.

B. ADMINISTRATIVE ARRANGEMENTS

1. Ministry of Public Health

The MOPH has demonstrated the administrative flexibility and will organize itself to carry out its programs. In subsequent months, as implementation is underway, we expect the MOPH will again be able to make whatever administrative changes may be necessary to meet this project's objectives.

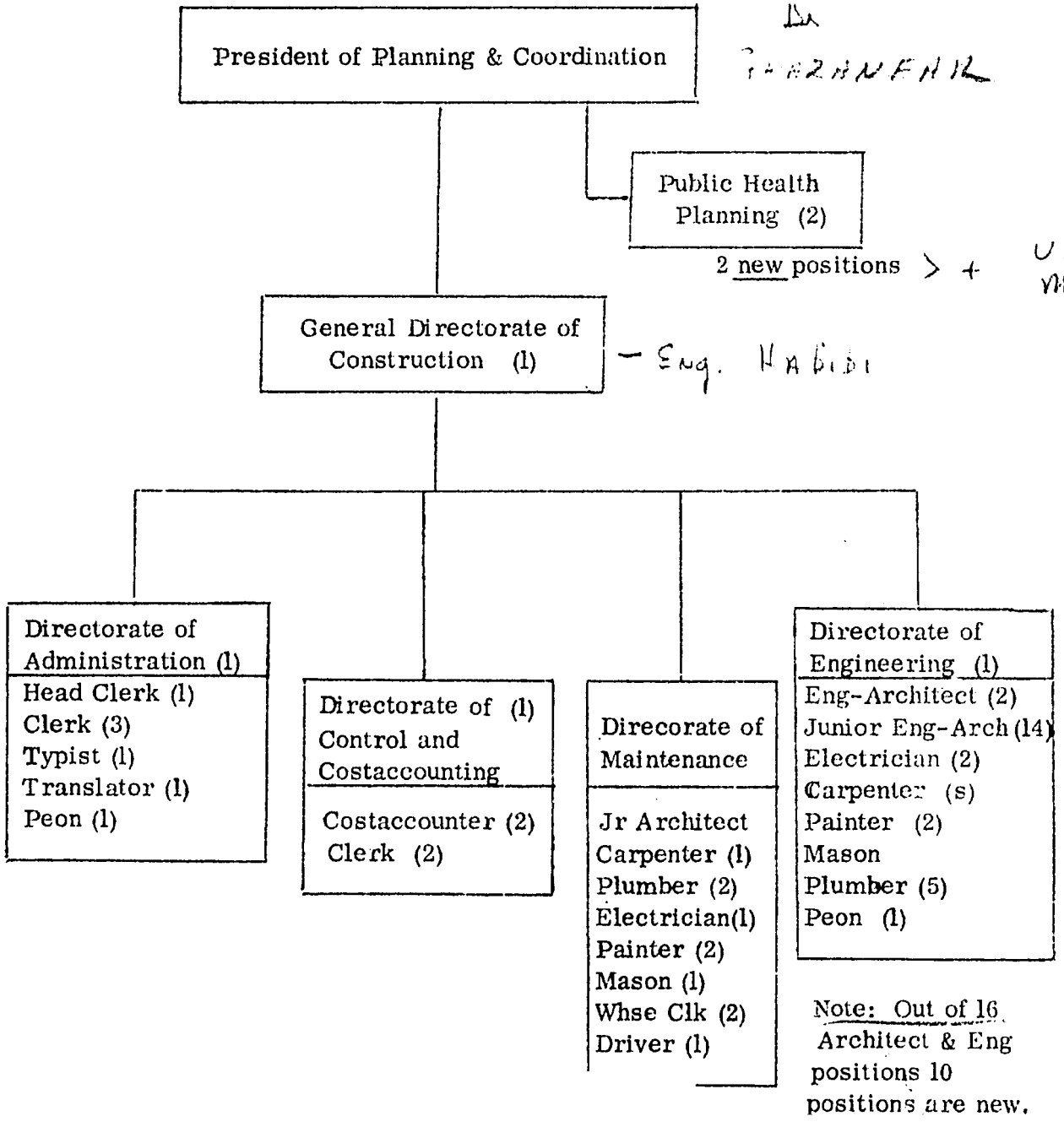
Figures 3, 4 and 5 show the new administrative arrangements within, respectively, the Presidency of Coordination and Planning (including the Directorate of Construction and Engineering), the Presidency of the Basic Health Services, and the Presidency of Administration.

The new positions are noted on the figures. Figure 6 shows the new Regional organizational arrangements.

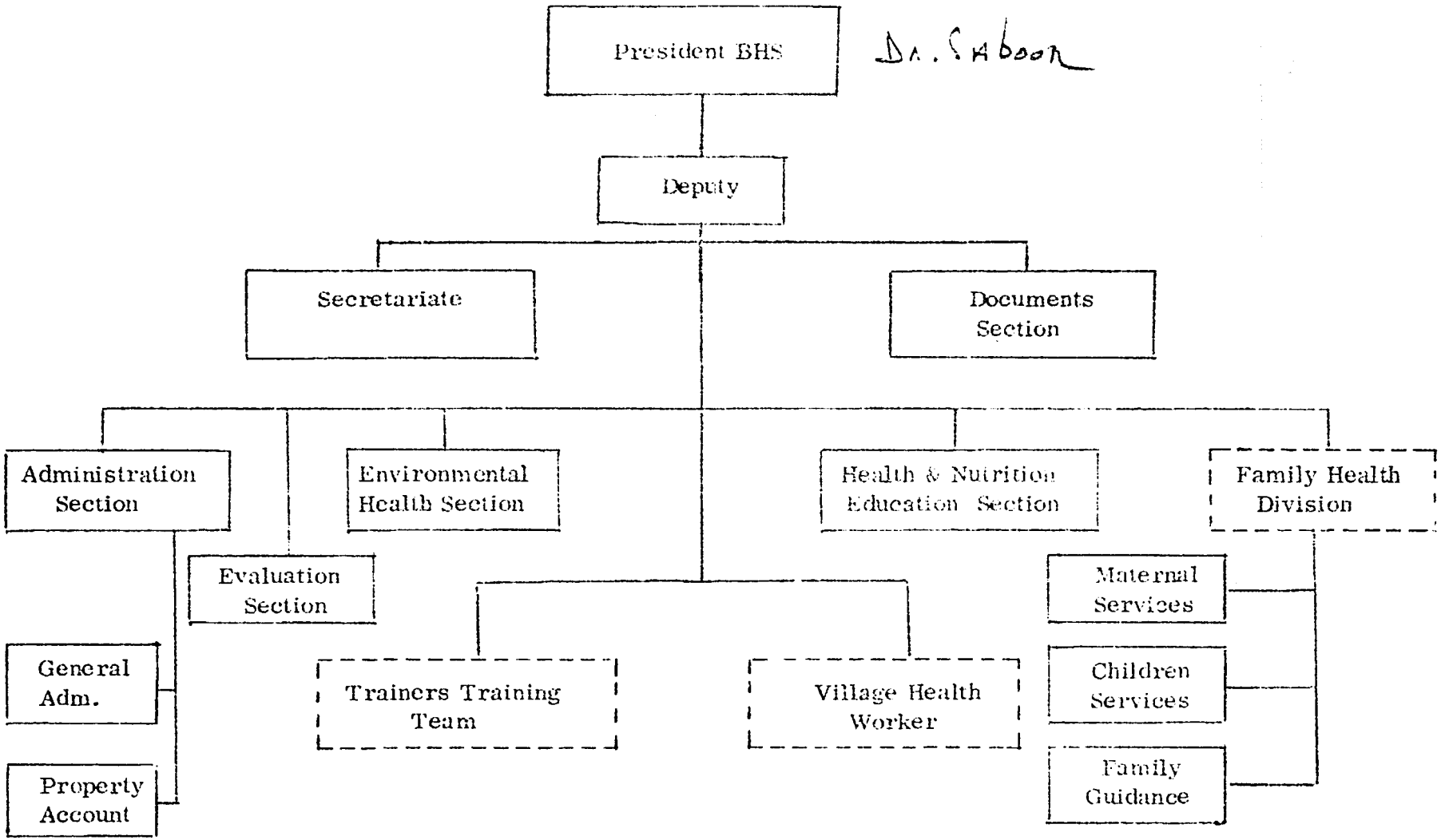
It is important to note that these changes are neither abrupt nor a direct result of this BHS project. In 1974 the MOPH established Regional Health Officer positions and based the personnel in Kabul. The intent was that these officers would administer their regions from Kabul. This did not work well, and the MOPH has taken this next step in decentralization. The Regional offices are to be located in the regions as are the personnel.

The lines of authority between Preventive and Curative medicine have been more clearly defined without creating an artificial and dysfunctional system. Preventive Medicine's authority now extends directly from the Kabul Ministry, through the Regional Health Officers, to Provincial Health Officers and then to the Basic Health Centers. Lateral communications are institutionalized both at the Regional and Provincial levels, thus insuring for the BHCs rational procedures for referrals to hospitals. Integration of budgeting and planning is provided through the Presidency of Coordination and Planning.

Figure 3



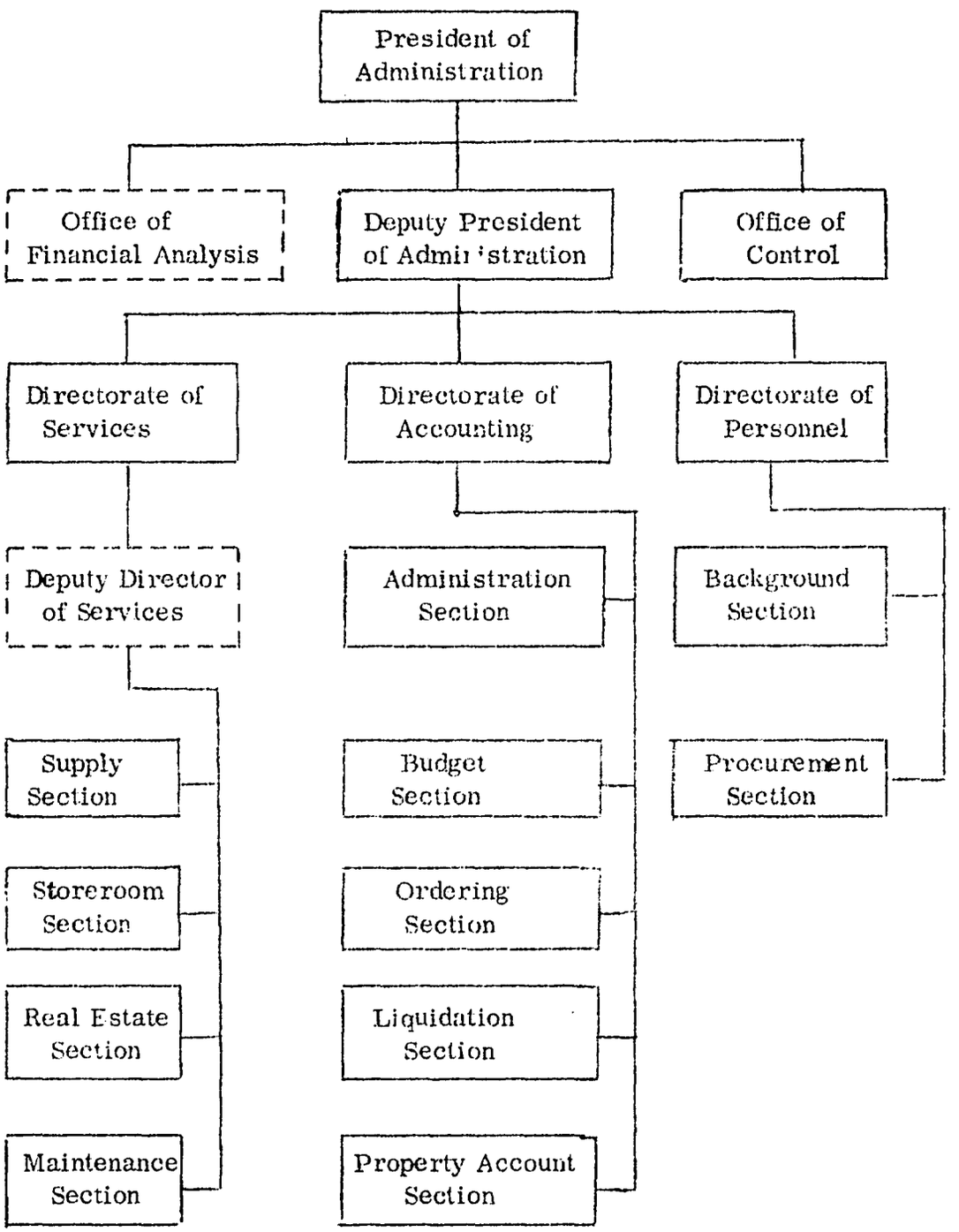
Note: Out of 16 Architect & Eng positions 10 positions are new.



NOTE: A fourth, new, professional position will be determined before July 1976.

Dotted lines indicate new units.

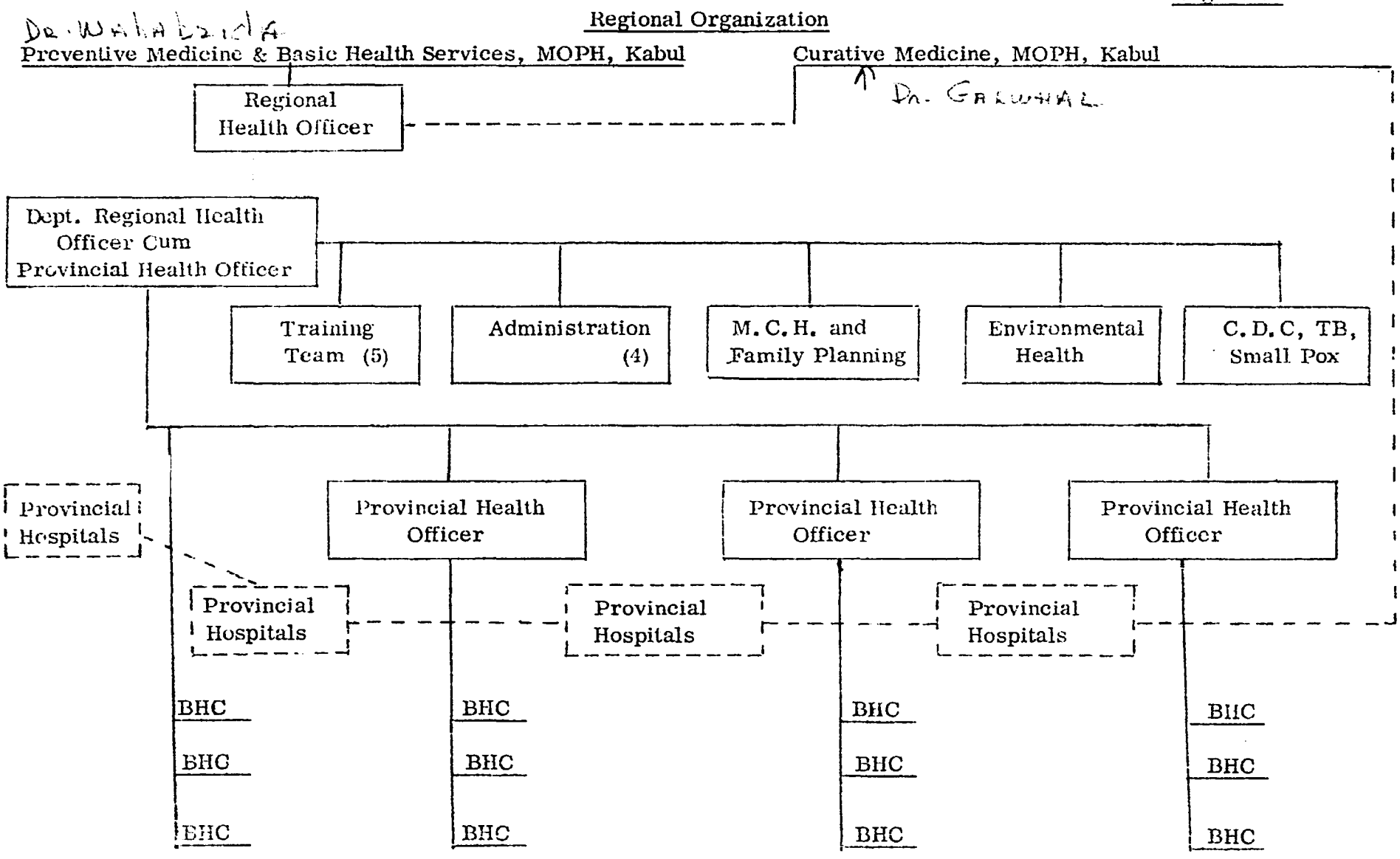
Figure 4



NOTE: Dotted lines indicate new units.

Figure 6

Regional Organization



2. USAID

Initially, USAID's manpower requirements (Direct Hire and Contract) will be high.* By the end of Phase I, as participants return from training programs in the U.S.A. and third countries, and as the in-country training program becomes institutionalized, U.S. personnel may be significantly decreased.

From the first year USAID will have three Direct Hire personnel in the Health/Family Planning Division involved full or part-time with the BHS project:

Project Advisor (see SPAR, Annex 6). This officer will play a direct role in the implementation of this project. The person will be concerned with planning and evaluation of all project components and will be primarily responsible for insuring that AID inputs are provided in a timely fashion.

Health/Family Planning Division Chief. ("Projects Officer") This officer is responsible for all personnel of the Division, including contract, and is responsible to the Mission Director and to AID/W for performance of all personnel engaged in the work of the Division. The BHS project will require more than 50 percent of this officer's time.

Deputy Chief, Health/Family Planning Division. This officer is the Project Adviser for the Afghan Family Guidance Association's (AFGA's) expansion program. This responsibility requires approximately 70 percent of this officer's time. The time not devoted to the AFGA project is to be devoted entirely to the BHS project, assisting the BHS Project Adviser and the Division Chief in all aspects of the project.

BHS Project Advisor Administrative Assistant and Translator (Local Hire). This is the second new position to be established by the USAID Health/FP Division for the new BHS project. Fifty percent of this employee's time will be direct support of the Division in the carrying out of its responsibilities for the BHS project. The other 50 percent will be related to the AFGA project, and

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* The net increase in U.S. direct-hire and contract personnel is two. One is the direct-hire Project Advisor, and the other is an increase in size of the MSH team from four to five.

to the translation/interpreting needs of the Division.

The Division also employs three secretaries of different grades. Additionally, personnel of Capital Development and Engineering Division and the Controller's Office assist with project implementation. The Engineering personnel will play a direct role, equivalent to a full man-year per year. Their task is to certify BHC site selections and adherence to construction specifications. The Controller will provide the equivalent of x/fraction of a man-year per year for control of and adherence to FAR procedures.

USAID Contract Personnel. It is proposed that a total of seven contract personnel assist the MOPH full time with the implementation of the various components of the project. We propose to continue the present contractors: Management Sciences for Health (MSH) and the University of California/Santa Cruz (UC/SC). The former has assisted the MOPH for approximately three years with a staff of four advisers. The latter has assisted the MOPH with the ANM project for approximately two years.

Management Sciences ofr Health (Phase I). The five advisors of the MSH team will assist the MOPH in the achievement of project outputs. Two advisors will participate directly with counterpart officials in the design, implementation, monitoring and evaluation of alternative delivery systems in selected provinces. The MSH team will participate in the designs of training programs and the writing and reproduction of training materials for alternative delivery systems personnel, BHC personnel, Provincial and Regional trainers and Kabul Ministry staff. They will advise on the content and methodology of training sessions, and they will assist with the teaching of personnel at all levels, particularly the "trainers of trainers." To insure stable and continuous inventories of essential drugs, medicines and other supplies in the alternative delivery systems and BHCs, the MSH will assist with logistic systems design including warehousing, records and issuing. With MSH assistance a rational system has already been installed in the central Kabul medical warehouse, and this system will be adapted and extended to regional, provincial and MCD (county) levels. MSH personnel in Kabul and in Cambridge headquarters will assist the MOPH with the selection of the shorter term, non-degree training programs in the U.S. and in third countries; they will assist the MOPH to establish criteria to be met by the candidates for these programs. For the longer term needs of the Ministry, MSH will assist with manpower and resources studies and with planning of health delivery programs beyond Phase I (1978).

In addition to the above duties relating directly to this Basic Health Services project, the team members will work at the direction of the Ministry on special problems for which they have the technical expertise, e.g. past work in the area of drug procurement may be continued. Five Advisors are proposed:

Public Health Advisor, Physician (Chief of Party)
Counterpart: Presidents of: (a) Preventive Medicine
(b) Basic Health Services

Will provide overall technical and management coordination to the rural health (BHS) delivery program. Will assist his counterparts in developing and implementing technical and management policies necessary for the expansion of the BHS and for maintaining competence level of team and for general administration of the MSH contract.

Management and Information Systems Adviser
Counterpart: President of Administration

Advises on the planning, installment, and maintenance of management systems in support of rural health services. Assists with the development of systems by which adequate equipment and supply levels are maintained at all levels of the BHS system. Specifically advises on information systems for administration equipment and supplies (drugs) transport. Advises on information systems for BHS evaluation - client record systems for VH and BHS through Kabul Ministry

Professional and Para-professional Training (Manpower) Adviser
Counterpart: To be assigned:

Advises on manpower requirements of the MOPH to develop and sustain a national BHS and VH system. Will advise the MOPH on its Phase I training plan, (1) overseas, (2) third country, and (3) in-service, in-country. Will assist with preparation of training materials and with teaching, primarily in a "trainer of trainers" role.

Adviser for Alternative Health Delivery Systems
Counterpart: To be assigned:

To assist his counterpart in the design, implementation, and evaluation of the experimental alternative delivery system. To provide specific guidance in the development of the technical materials and the experimental methodology as well as projections for a national program

Field Trainer/Alternative Health Delivery Project
Counterpart: To be assigned:

To assist his counterpart in testing a training methodology for teaching village and other health workers. To design simplified training materials that may be mass produced.

Auxiliary Nurse Midwife Training (University of California/ Santa Cruz). Like MSH, this is an on-going activity, and becomes a sub-project of the BHS project.

Two advisors will be provided. One will be a public health nurse educator and the other will be a nurse-midwife educator. Each will continue to work full time with the administrators and faculty of the Kabul ANM school. They assist with curriculum evaluation and revision and with training of the ANM faculty. In Phase I, they will develop institutional linkages between the ANM school and the BHS system in the project area. These are necessary to insure professional (technical) backstopping of the ANMs working in rural centers. The advisors will assist the ANM school and the MOPH with the design of in-service training (return to the school) for the ANMs working in the rural areas.

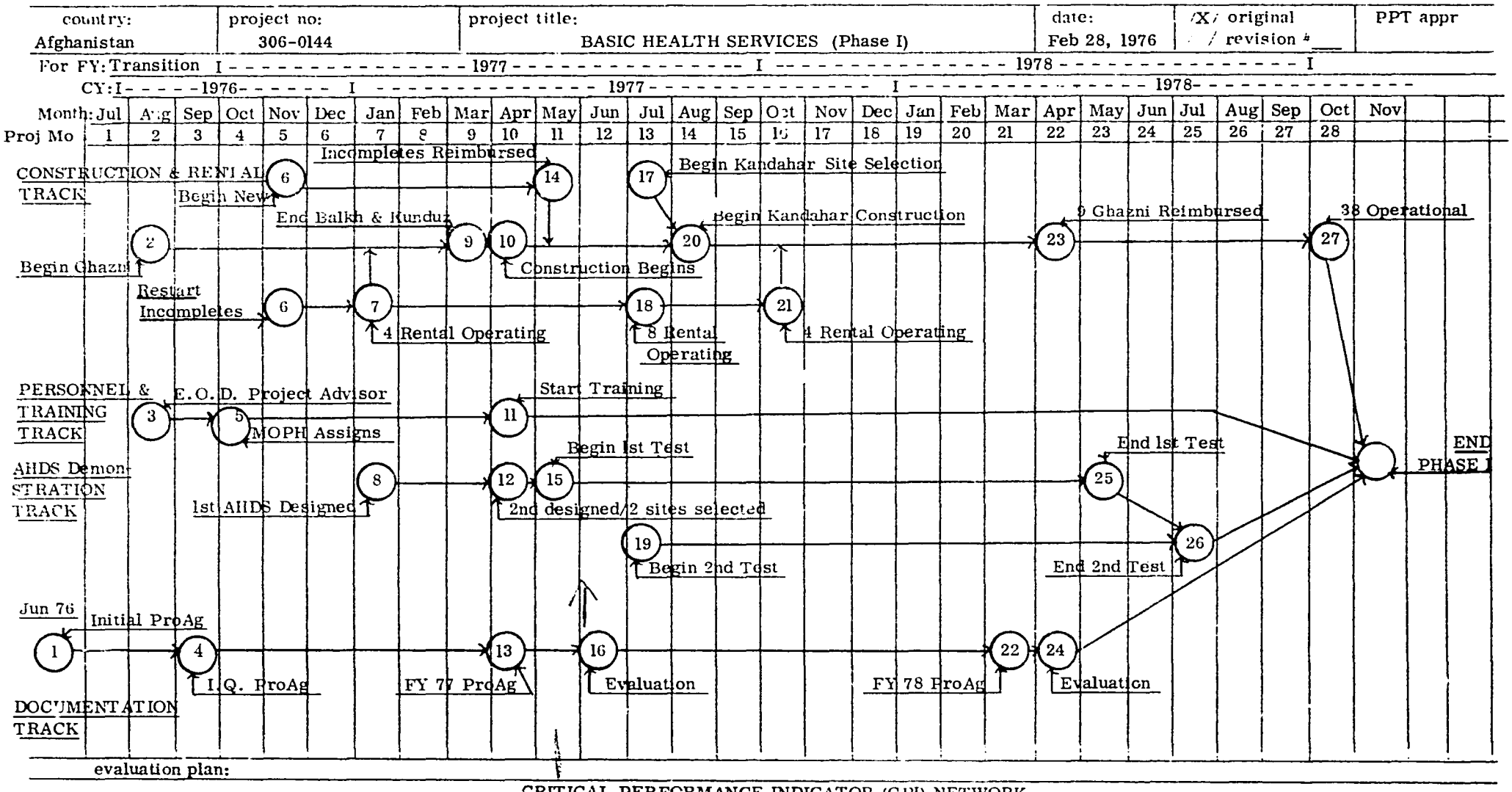
C. IMPLEMENTATION

1. Project Performance Tracking Network

Phase I, while representing only 15 percent of the MOPH national plan, is still large and relatively complex. One hundred percent achievement of targets is designed, but experience teaches that the Afghan concept expressed in Dari, ".... all in the fullness of time" is to be taken as seriously as the best designs of the planners. USAID does not intend to hedge, but to be realistic. The successful completion of 75 percent of this project design within the 28-month time frame will be considered good, especially if in the latter third of the project, progress is accelerating. The implementation date will begin not later than July 1, 1976, assuming AID/W and GOA approvals and a Project Agreement signing before that date. The end of project (E.O.P.) is September 30, 1978.

PROJECT PERFORMANCE TRACKING (PPT) SYSTEM

country:	project no:	project title:	date:	/X/ original / revision #	PPT appr
Afghanistan	306-0144	BASIC HEALTH SERVICES (Phase I)	Feb 28, 1976		



evaluation plan:

CRITICAL PERFORMANCE INDICATOR (CPI) NETWORK

Country:	Project No:	Project Title:	date:	/X/ original / / revision #	apprvd:
Afghanistan	306-0144	BASIC HEALTH SERVICES (Phase I)	2/28/76		

CPI DESCRIPTION			Respon-sibility
	Date		
Prior Actions			
A.	Jan 76	GOA approval of project concept.	MOPH
B.	Mar 76	Phase I Project Paper submitted to AID/W.	USAID
C.	May 76	AID/W approves Project Paper.	AID/W
1.	Jun 76	FY 76 ProAg signed. Based upon receipt approval from AID/W prior mid-May 76.	USAID/ MinPlan
2.	Aug 76	Site selection for 9 new BHCs in Ghazni region. 3 incomplete BHCs; 2 in Ghazni and 1 in Kunduz will also be certified during this period by MOPH and USAID.	MOPH/ USAID
3.	Aug 76	BHS Project Advisor on duty in Afghanistan.	AID/W/ USAID
4.	Sep 76	ProAg for Transition Fiscal Quarter.	USAID/ MOPH
5.	Oct 76	10 new employees, 2 professional and 8 technical assigned to Construction and Engineering Div. 4 new professional employees assigned to Presidency Basic Health Services.	MOPH
6.	Nov 76	Designs agreed and construction begins on 9 new BHCs in Ghazni Region and restart incomplete construction on 2 BHCs in Ghazni and 1 in Kunduz.	MOPH
7.	Jan 77	Four rented BHCs including one Rank I, begin operating at agreed sites in Ghazni. (Sites where new BHCs are under construction.)	MOPH
8.	Jan 77	First Alternative Health Delivery System (AHDS) designed and ready for field testing.	MOPH/ MSH
9.	Mar 77	BHC site selection completed in Balkh and Kunduz Regions. (14 in Balkh and 11 in Kunduz.)	MOPH/ USAID
10.	Apr 77	Construction begins on the 25 BHCs in the Balkh and Kunduz Regions.	MOPH
11.	Apr 77	Training programs for MOPH personnel to be assigned to new BHCs will begin.	MOPH/ MSH
12.	Apr 77	Two AHDS sites selected. Second AHDS system designed.	MOPH/ MSH
13.	Apr 77	ProAg signed for FY 77 funds.	USAID/ MOPH
14.	May 77	"Incomplete" BHCs - 2 in Ghazni, 1 in Kunduz - completed and jointly certified "operational" by terms of ProAg. (FAR reimbursement made.)	MOPH/ USAID
15.	May 77	First AHDS model begins test in selected site.	MOPH/ MSH
16.	Jun 77	Evaluation	USAID/ MOPH
17.	Jul 77	BHC sites (13) selected in Kandahar Region.	MOPH/ USAID
18.	Jul 77	Eight rented (new) BHCs, including 2 Rank I, 4 in Balkh, 4 in Kunduz.	MOPH
19.	Jul 77	Second AHDS model begins test in selected site.	MOPH/ MSH

Country:	Project No.:	Project Title:	date:	X / original / / revision #	apprvd:
Afghanistan	306-0144	BASIC HEALTH SERVICES (Phase I)	2/28/76		

CPI DESCRIPTION			Responsibility
	Date		
20.	Aug 77	Construction begins on 13 new BHCs in Kandahar.	MOPH
21.	Oct 77	Four rented BHCs including 1 Rank I, operating in Kandahar	MOPH
22.	Mar 78	ProAg signed for funding balance of project.	USAID/ MOPH
23.	Apr 78	9 new BHCs in Ghazni certified by MOPH and USAID as "operational" under terms of ProAg. (FAR reimbursement made.)	MOPH/ USAID
24.	Apr 78	Evaluation.	USAID/ MOPH
25.	May 78	First AHDS test ends. Results studied.	MSH MOPH/USAID
26.	Jul 78	Second AHDS test ends. Results studied.	MOPH/MSH/ USAID
27.	Oct 78	38 new BHCs completed. 14 in Balkh, 11 in Kunduz and 13 in Kandahar. Certified by MOPH and USAID as "operational" under terms of ProAg and eligible for reimbursement by USAID on FAR procedures.	MOPH/ USAID

2. MOPH Personnel Projections

Table 3 following is from a draft prepared by the MOPH for the Seven Year Development Plan. This relates personnel needs to projected availabilities. There are some instances, notably Auxiliary Nurse Midwives (ANMs), where projected availability is considerably higher than current facts can support; however, even in the ANM category, proceeding from the 1976 base of 101 and projecting graduation levels at 100 per year beginning with 1977, there will be sufficient numbers for the BHS programs. In seven years, it may be noted the more serious deficiencies are vaccinators (approximately 50 percent), sanitarians, lab technicians and nurses. However, given the flexibility of BHC staffing, there can be shifts, e.g. between compounders and pharmacists; nurses and doctors; and nurses and vaccinators. Depending on population densities and proximity of centers, both vaccinators and laboratory technicians can sometimes provide coverage for more than one center. Further, as the MOPH studies the projected deficiencies (in absolute numbers) it is expected measures will be taken to expand the educational programs. Such planning is already in evidence between the Ministry of Planning and Kabul University in connection with the Seven Year Development Plan. We do not, therefore, see any serious personnel constraint for the Phase I BHS project.

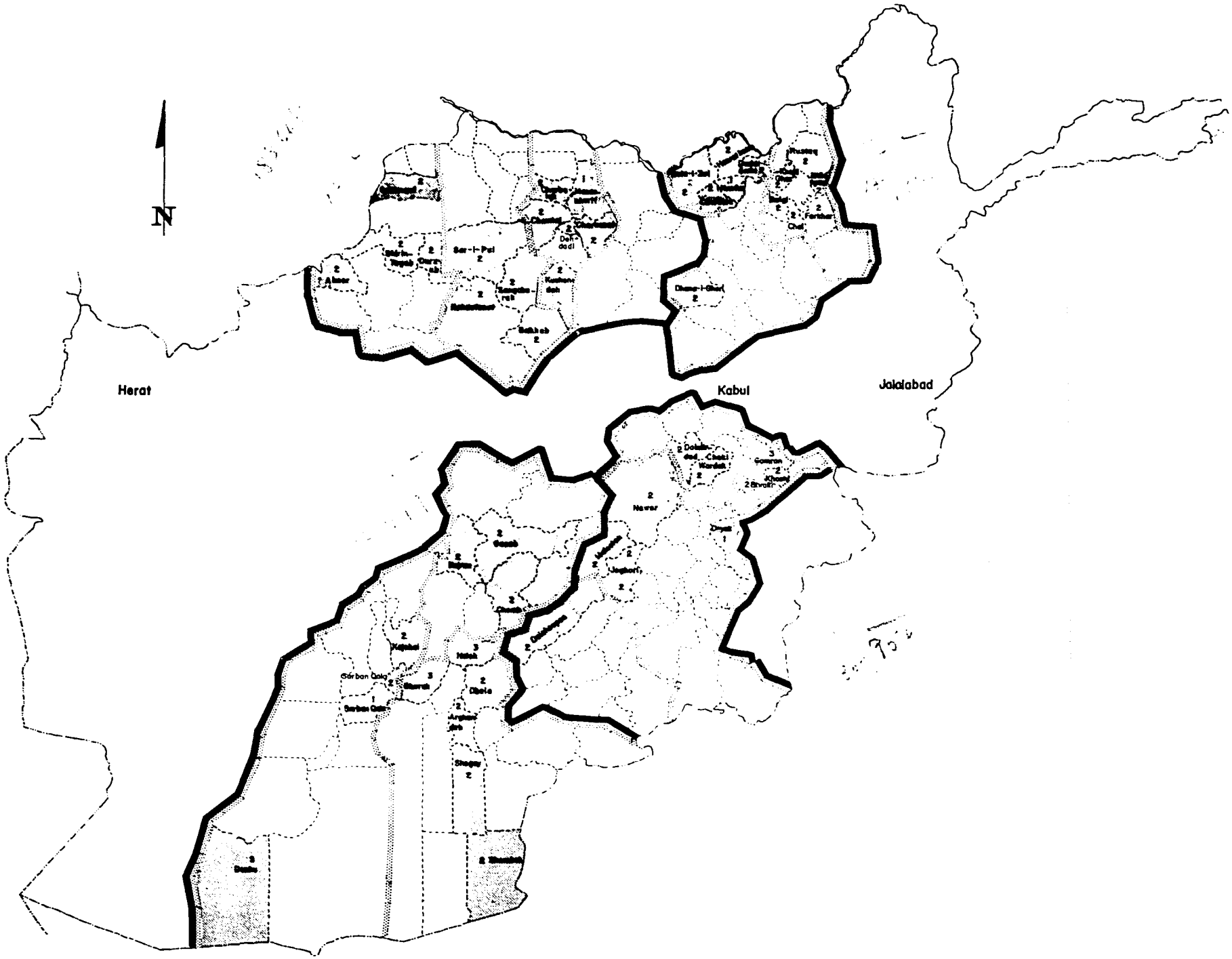

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Table 3

Manpower Requirements

Year	Medical Recorder	Vaccinator	Asst. Dentist	Sanitarian	ANM Midwife	X-ray Mechanic	X-ray Tech	Lab Tech	Compounder	Pharmacist	Nurse	Doctor
1354 needed	82	700	60	412	261	46	69	233	229	109	729	645
1975 present	17	645	118	297	260	62	120	239	291	81	787	703
1355 needed	87	762	65	443	287	51	79	364	260	119	805	701
1976 present	17	645	117	312	310	67	120	263	311	108	847	792
1356 needed	88	818	66	472	313	58	81	429	287	146	852	743
1977 present	17	645	115	336	410	67	120	285	325	134	907	884
1357 needed	94	875	68	504	339	62	89	466	318	149	912	822
1978 present	17	645	114	352	510	71	120	303	341	297	967	1033
1358 needed	19	927	71	534	365	61	97	501	350	151	1144	914
1979 present	17	645	112	368	610	73	120	321	359	274	027	1095
1359 needed	108	991	72	567	391	71	107	539	384	155	1322	1023
1980 present	17	645	111	384	710	75	120	339	376	330	1087	1229
1360 needed	115	1058	74	604	417	76	115	576	420	161	1534	1155
1981 present	17	645	109	400	810	77	120	257	393	361	1139	1389
1361 needed	119	1114	75	635	443	79	119	608	450	164	1605	1202
1982 present	17	645	108	416	910	79	120	375	410	451	1207	1564

Sources: Draft of MOPH's Seven-Year Development Plan (1976-1982)

3. Personnel Training

Overseas Training

The selection of personnel for overseas training will begin in June 1976. Those requiring English training to qualify will be scheduled, with alternates, for language school. Four candidates for the graduate level program will be selected and qualified by August 30 1976. Participants selection and the final Phase I participant training plan will be completed on or before January 1, 1977.

In-Country Training

A Phase I, in-service, in-country training program master plan, is to be implemented. While this is primarily for the personnel to be employed in the Phase I project areas, it would not exclude personnel in non-project areas. The personnel to be assigned to the Regional, Provincial, and BHC levels will in all cases have had professional and para-professional training in their specialities; however, the application of these skills to the rural setting and to the concepts of preventive medicine needs to be taught. The concept of BHC personnel functioning as an integrated team needs to be taught. Supervisory skills of clinic directors, Provincial and Regional Health Officer need to be improved. Training of trainers will begin on or before January 1, 1977. Implementation of the plan will be coordinated with the clinic expansion plan to insure, to the degree possible, that each clinic upon opening will have personnel trained especially for BHC work.

Third-Country Training

MSH will advise the MOPH on the utilization of training programs and orientation visits by MOPH personnel to countries having programs relevant to the programs of Afghanistan. A third-country training observation program will begin by January 1, 1977.

4. BHC Information System

The final health service points are the BHCs and the AHDS workers. At each of these levels, data must be acquired for each person served. These data must be summarized for periodic reporting to Provincial health offices, Regional health offices, and the MOPH in Kabul. A BHC record system was designed for the Parwan Province experiment and tested over the brief (six months) duration of

that experiment. The experience gained enabled the MOPH tc make a good beginning in the design of effective and simple clinic and client information records.

Early in Phase I, an agreed client record for use at the BHC, together with the summary reports required for each BHC tc report up thrcugh the BHS hierarchy, will be developed with MSH assistance. The systcm will be included in the medical and para-medical health worker manuals and in-service training programs will include instruction on the purpose and use of the records and the system as a whole. BHS supervisors will monitor and retrain BHC personnel in the operation of the information system during BHC inspections. The AHDS models will similarly test methods of client data collection and reporting. Because AHDS workers will likely be persons with very little education, some may be illiterate, exceptionally simple and innovative systems will have tc be developed.

The purposes of the information system are: (a) tc build individual client health histories in order that subsequent health personnel may serve individuals more effectively; (b) to develop over time the data necessary to construct a health "profile" of the people served within a particular geographic area; (c) tc provide a basis for the evaluation of the performance of each BHC in general and individual personnel; and (d) tc provide a basis for subsequent health research at the MCD, provincial, regional and national levels. Data which are aggregated and analyzed at these levels will also be used in the periodic Phase I evaluations.

Client record forms, keyed to instruction manuals and training programs, will serve not only to record data but to teach BHC personnel how to serve people. A client record form, containing a series of questions, serves as a checklist for physicians and para-medicals when they are interviewing clients.

In the Parwan Province experiment, information gathering was kept quite simple and included:

1. A brief patient history: patient complaint, diagnosis (including laboratory tests), and treatment. Child weight charts and vaccination records were also maintained. If a patient was referred to a hospital, this was noted.

2. Summary BHC records, based on individual client records and administrative records, included numbers of clients by age, sex, complaint, diagnoses and treatment. The BHCs recorded and reported on vaccination activities, activities of the clinic sanitarian and such administrative matters as vehicle use, supplies, inventories, etc.

This simple system when adequately maintained by trained personnel, will provide reasonably accurate data for reporting and systematic analysis. The periodic reporting will be fairly frequently, perhaps as often as monthly, to provide information to higher levels in the system. The information system will provide a basis for estimating the proportion of the target population being served, perceptions of the importance of various diseases, shifting patterns of disease, supply system functions and, over time, a basis for the MOPH's short and long run financial planning.

5. Supply Management

One of the first problems of the MOPH addressed by the MSH management advisory team was the procuring, shipping, warehousing, and issuing of commodities. USAID assistance was provided for central warehouse equipment which is now installed. MSH provided the technical assistance necessary for the rationalizing of the supply and equipment systems. At the central warehouse level new systems have been installed, new job descriptions adopted, and work manuals developed. Personnel of the Presidency of Administration received short-term, practical training in the U.S. which was planned and administered by the MSH team. Thus, a good beginning has been made.

The MSH team assisted the MCPH in studies of the commodities systems down to the BHC level and, in the Parwan model, tested elements of this system. The problems are considerable and typical of least developed countries, e.g. drugs and medicines are allocated quarterly (and sometimes not every quarter). Decisions on allocations are made at the center -- a "push" system -- with little or nothing known about inventory levels or needs at the Provincial and BHC levels. The wrecked, delayed or non-existent delivery truck is probably one of the most common excuses for the non-receipt of supplies at Provincial facilities and BHCs. The formulary had not, over the years, been examined critically, with a result that the system was burdened by greater numbers of items than appropriate for the needs at the BHC level. As part of its work, the MSH team analyzed the system and the commodities to be moved within the system. During

"PUSH" Decision at center
"Pull" " at end use - i.e. BHC

Phase I, final decisions will be taken by the MOPH regarding the inventories -- kinds of and quantities -- to be maintained at the BHCs. A mixed "push" and "pull" supply system will be adopted as the most rational, i.e., there will continue to be decision-making at the center on allocations of commodities; however, as more BHCs become fully operational and as effective inventory reporting systems are maintained throughout the system, the "pull" element will become more important. Decision-making will be more and more a function of the BHC personnel and their Provincial and Regional supervisors. Complex systems will be avoided as much as possible. An example of the simple system envisaged is MSH's proposed "two bin" system for contraceptive commodities. At the BHC, two bins, each holding a three-month supply would be filled. When the first bin is empty, an order form is submitted; while waiting for the new supplies, needs are met out of the second bin. For the more commonly used medicines, similar simple systems will be designed and adopted. Reporting forms will be kept simple - summary forms being sufficient for maintaining inventories. By establishing the Regional administrative, supervisory and training system, commodities are moved out of Kabul and nearer to the rural BHCs.

The objective is a smoothly functioning system which insures there being a continuous supply of basic drugs, contraceptives, supplies and training materials at all BHCs within the Phase I areas. The designs for these sub-systems, together with job descriptions for the logistics personnel and work manuals, will have been agreed by March 1977. Assignment and training of personnel will proceed parallel with the opening of the Regional offices and the new BHCs. Warehousing will be provided at the Regional Rank I Centers at specified Provincial centers, and at the BHCs. The Regional administrative personnel will have a relatively smaller geographic area to be responsible for and should acquire quickly an understanding of their transport problems and how to solve them. There will be fewer lost delivery trucks.

6. Physical Facilities -- the Basic Health Center

The MOPH and USAID desire to see health services brought to the rural areas as early as possible. In the Phase I project areas, this will require the construction of facilities; however, instead of waiting for construction to be complete, the MOPH will rent facilities and assign staff. This will be done only where MOPH and local people have agreed on a new BHC site and where construction is to be completed within 24 months. USAID will assist with rental costs up to

a maximum of 24 months and only where a new BHC is to be constructed. We have learned in the AFGA project that very few villages and towns have facilities for rent; we therefore plan for only 20, four of which will be at the Rank I sites.

Rental

During Phase I, funds will be required for the rental of facilities at 20 different sites. The cost over 36 months is estimated to be $20,000 of which USAID would contribute 75 percent or $15,000.

Construction of New BHCs

In the areas selected for Phase I activities, there are approximately 145 Minor Civil Divisions (MCDs). These administrative units are called Woleswalis and Alequadaris. Of these 145, the MOPH has determined that 50 require a new BHC. Among site criteria are: Population and its distribution; expected acceptance by the population; the perceived health needs; administrative requirements, etc. In Phase I all of these new centers will be brought to an agreed minimal operational standard. (See section 7, following.)

In Table 3, the new BHC sites are tentatively identified. Final selection will be determined by site visits. A Rank I center will be the administrative and training center for the Health Region, and there will be one of these in each region. In Phase I, four of these will be built. The MOPH, by using the Provisional Gazetteer and the ADS/SUNY population density maps, has identified what it calls "Population of Catchment Area" and by its definition, all these persons (fifth column, Table 4) would have reasonable access to the BHCs. It should be noted that in the tables there are a few exceptions, notably at Jarqeduq and Qaramqul in Faryab Province and at Gomran in Logar Province. The MOPH's information regarding population of the catchment areas at these locations differs considerably from other data, and final determination of the size of the BHCs required can only be determined by site visits. The total population within the catchment is estimated to be 831,213 -- or roughly half the population living within these administrative units. These 830,000 comprise the total target population for Phase I.

Following Table 4 is a map of Afghanistan which indicates the Phase I project areas and the BHC by Rank and site.

Basic Health Center Sites

1. Kandahar Health Region

Province	Woleswali	Alaquadari	No. of Towns/ Villages	Population of Catchment Area	BHC Site	RANK I	RANK II	RANK III
Kandahar		Ghorak	11	6468	Ghorak Ctr			1
		Naish	14	8232	Naish Ctr			1
	Dhola		14	8232	T.B.S. fn/		1	
	Arghandab		35	20580	T.B.S.		1	
	Shega		17	9900	T.B.S.		1	
	Shoarabak		25	14700	Shoarabak		1	
Helmand		Grishk	46	27048	T.B.S.	1		
		Kajakai	46	27048	Tafawar		1	
		Sarban Qala	18	10584	Sarban Q. Ctr		1	
	Deshu		9	5292	Deshu Ctr			1
Oruzgan	Choara		12	7761	Choara Ctr		1	
	Kajran		15	8820	Kajran Ctr		1	
	Gazab		18	10584	Gazab Ctr		1	
Totals Kandahar Region			280	165249		1	9	3

Table 4.b

II. Kunduz Health Region

Province	Woleswali	Alequadari	No. of Towns/ Villages	Population of Catchment Area	BHC Site	RANK I	RANK II	RANK III
Kunduz	Kunduz Center		30	46,000	Kunduz	1		
	Chardara		25	14,700	Door Robad		1	
	Emam Saheb		20	11,760	Basus		1	
	Dashti Archi		17	9,996	Shahrawan		1	
	Qala-i-zal		14	8,232	Q. Ctr		1 fn/	
Takhar		Chal	10	10,584	Chal Ctr.		1	
	Khawaja Ghar		22	12,936	Kh. Ghar		1	
		Bangi	22	12,936	Jalayer K.		1	
	Rustaq		24	14,112	Rustaq Ctr.		1	
	Farkhar		17	9,996	Farkhar		1	
		Kalafgan	15	8,920	T.B.S.		1	
Baghalan		Dhana-i-Ghori	36	21,168			1	
Total Kunduz Region			252	181,340		1	II	0

fn/ This BHC is under construction and to be completed in this project.

Table 4.c

III. Balkh Health Regions

Province	Woleswali	Alequadari	No. of Towns/ Villages	Population of Catchment Area	BHC Site	RANK I	RANK II	RANK III
Balkh	Chemtal		17	9,996	Aheen Qala		1	
		Kushendeh	17	9,996	Kush. Ctr		1	
		Dehdadi	24	14,112	Dehdadi		1	
	Mazarsharif		48	28,324	Balkh	1		
	Charbolak		48	28,224	Qoorachi		1	
		Charkanat	25	14,700	Kohnaqeshlaq		1	
Jozjan	Sangcharak		20	11,760	Sazi-Kalan		1	
	Sar-i-pul		29	17,052	Saripul		1	
		Kohestanat	13	9,520	Kohestanat		1	
		Balkhab	15	8,820	Toghi-Payan		1	
Faryab	Darzab		4	2,352	Jarqoduq		1	
	Shirin Tagah		15	8,820	SaidKoh		1	
		Almar	23	13,524	Almar Ctr		1	
		Qaramoul	11	6,468	T.B.S.		1	
Total Balkh Region			309	183,668		1	13	0

Table 4.d

IV. Ghazni Health Region

Province	Woleswali	Alequadari	No. of Towns/ Villages	Population of Catchment Area	BHC Site	RANK I	RANK II	RANK III	
Zabul	Daiachoopan		65	38,220	T.B.S.		1		
Ghazni	Joghori		44	19,404	T.B.S.		1		
	Joghori		33	25,812	Mulakhail		1		fn/
	Malestan	Sarasaheb	90	52,920	Nawdeh		1		
	Ghazni	DeYak	35	20,540	Ghazni	1			
	Nawor		30	17,640	Dahana-i-Barigak		1		fn/
Maidan	Chaki Wardak		43	25,284	Bandi Chak		1		
		Daimirdad	35	20,580	T.B.S.		1		
Logar		Khoshi	35	25,284	Shinkai		1		
	Baraki		56	32,928	Baraki Ctr		1		
	Md. Agha		38	22,344	Gomran				1
Total Ghazni Region			504	300,956		1	9		1
PHASE I Project Totals:			1,345	831,213		4	42		4

fn/ BHC under construction and to be completed in this project.

Rank I - There will be only one Rank I center for each Health Region in Afghanistan. In Phase I, four of this Rank will be built. The Rank I BHC includes a polyclinic of ten rooms, a training center having two rooms for instruction and four rooms for the Regional Health Officer and his staff. Living quarters will be provided for the polyclinic personnel and hostel space for the trainees to be served by the training center. The estimated cost of each Rank I BHC is $60,000 of which USAID would pay 75 percent - Total $180,000 for four.

Rank II - A Rank II BHC consists of a ten room polyclinic, and living quarters at the site for BHC personnel. The estimated cost of each Rank II BHC is $42,500 of which USAID would pay 75 percent - Total $1,243,125 for 39.

Rank III - a Rank III BHC will consist of a six room polyclinic and living quarters for the BHC personnel. The estimated cost of each Rank III BHC is $30,000 of which USAID would pay 75 percent - Total $90,000 for four.

The cost of the construction of the above new BHCs in the Phase I areas is estimated to be $2,017,500. USAID's contribution would be 75 percent or a total of $1,513,125. The cost estimates are based upon architectural and engineering drawings prepared for MCPH by the Minister of Public Works some years ago. New drawings will be prepared by MCPH and carefully reviewed by USAID. It is possible, with some modifications in the buildings' layout and the drawings and upon a detailed review of the bills of material and labor charges, that some savings will accrue to the project. Based upon the Mission's experience in other FAR assisted projects, we are confident that the estimated unit costs -- exclusive of inflationary factors -- will not exceed these stated in the Project Paper. Additionally, there are three Rank II centers within the Phase I area which, on May 1, 1976 will average 60 percent completion. Subject to inspection by the MCPH and USAID Engineers and the BHS Project Advisor and certification that the existing construction meets the agreed standards, USAID will, by the same FAR standards applying to new construction, pay up to 75 percent of the costs required to complete these three centers, estimated at $38,250.

Site Selection - The sites selected by the MCPH (Table 4) are mostly tentative and based primarily upon information available from the Provisional Gazateer and from the ADS/SUNY MCD population density maps. When final site selections are made, they may be

expected with a few exceptions, to be in the 50 MCDs now indicated. However, to determine which town or village among the many in each MCDs should be a BHC site requires field visits. Field visits will begin on or before the signing of the Project Agreement. First, the three incomplete centers (Qali-i-zel in Kunduz Region, and Mula Khail and Dahana-i-Barigak in Ghazni Region) must be jointly certified by the MCPH and USAID engineering and the project Advisor so that they will qualify for USAID assistance under the FAR procedure. Then, the new sites will be selected in the following order:

(1)	Ghazni Region	June through September 1976
(2)	Kunduz Region	September through December 1976
(3)	Mazar Region	December 1976 through March 1977
(4)	Helmand Region	March through June 1977

To expedite the delivery of health services, the site survey teams, in addition to certifying new BHC sites, will seek to find buildings which may be rented. When these are located, the MCPH will make arrangements for renting, renovating, supplying and staffing. Temporary facilities will be located only in or near the town/village where a new BHC is being built, one of the reasons being that the BHC personnel will have an interest in seeing the new BHC built to standards and on as fast a schedule as is reasonable. Special priority will be given to the temporary Rank I centers so that regional administration and training can be initiated.

Each site will be jointly certified by the MCPH and USAID, based on a site visit. No BHC will be eligible for USAID assistance if USAID has not participated in certification of the site before construction.

BHC Designs

The MOPH has agreed with USAID to review its present designs and specifications. Prior to the implementation of this project, the MCPH will have prepared preliminary drawings. A locally available and mutually agreed A&E firm, possibly Kabul University, will evaluate the plans and, with advisory assistance from MCPH and USAID, complete designs and prepare working blueprints for the BHC contractors.

Construction Schedules

Immediately upon completion of the site certifications in each Region, the MOPH will make arrangements for construction contracts. Construction should begin as soon as possible but not later than 60 days

after site certification.

Construction Monitoring

Construction will be monitered both by MCPH and USAID engineering personnel. Approximately three visits will be made to each site while construction is under way. A final site visit is required by USAID to certify the building is complete and meets agreed standards. This is a necessary but not sufficient condition for FAR payment.

7. The Operational Basic Health Center

The focal point of the Phase I activity is the BHC network. The BHC network is important first because of the service it will provide to the people in its catchment areas, secondly, it is important as the back-up support system for the AHDS models being tested in Phase I. Finally, the operation of 50 BHCs in the four project areas is the most critical indicator of the abilities of the MCPH and USAID to achieve the project purpose on a planned schedule.

The Project Agreement signed between USAID and the MCPH will describe clearly the criteria to be met by a Basic Health Center to qualify for reimbursement by USAID of 75% of the agreed upon direct construction costs: materials, labor and transportation. Each BHC will have a minimum staff of qualified personnel each of whom will have received additional, in-service training especially for service in a BHC. For either a Rank I or Rank II center the BHC staff will include a minimum of one supervising physician (alternatively a senior nurse), one Auxiliary Nurse Midwife and two para-medical personnel (The two para-medical may be from among the following: vaccinator, sanitarian, nurse, laboratory technician, pharmacist or compounder.).*

For a Rank III center, the minimum staff will be three, including the clinic director (either a physician or senior nurse) and Auxiliary Nurse Midwife.

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* Optimum, planned staff is 7 for Rank I and II; 4 for Rank III.

Operational Criteria

1. Each medical, para-medical and auxuliary nurse midwife will have completed satisfactorily the educational and MOPH certification requirements for the position to which he/she is assigned.

2. Each clinic will have the necessary supplies (ledgers, charts, etc.) necessary for the maintenance of a complete clinic record system upon which will be based summary monthly reports (health, administrative, financial) to the Kabul Ministry through the Provincial and Regional Health Officers. In-service training will have taught the correct maintenance of the records and preparation of the required reports.

3. Each BHC will have the minimal medical equipment for the services to be provided -- these will be specifically identified in the first "Letter of Understanding" to be agreed between USAID and the MCPH prior to project implementation.

4. Each BHC will have sufficient drugs, medicines, dressings and other supplies sufficient for three month's operations. A specific inventory will be agreed between USAID and the MOPH in the first "Letter of Understanding."

5. Each BHC will have one vehicle permanently assigned.

6. The leadership of each village within the BHC catchment area will have been visited by an employee of the MOPH and been advised of the date the BHC is to open and of the kinds of service it is to be prepared to dispense.

7. Each BHC will have been inspected jointly by USAID and the MOPH prior to, during and upon completion of construction and be certified for adherence to site, design and construction specifications. Living quarters and other facilities adjacent to the poly-clinic building are to have been similarly certified.

The above criteria will be met before the USAID project advisor and USAID's Engineering and Controller staff will certify a BHC "operational" and eligible for FAR payment. To insure this system proceeds in an orderly and timely fashion will require continuous and careful monitoring by MCPH and USAID staff. Coordination of all project components -- personnel, training, construction, supplies, reporting -- must be carefully maintained and schedules adhered to.

8. Alternative Health Delivery Systems(AHDS)

Introduction

The Basic Health Service program has existed for some time, and through this project we will improve it and expand it. We are starting from a base, which while weak, exists and is understood. Many procedures will be new, but basic concepts are generally accepted.

The Alternative Health Delivery Systems (AHDS) component of this Phase I project is much newer. There exists little knowledge or experience in Afghanistan and few except the higher officials of the MCPH have studied the AHDS concepts as applied in other countries. There is, however, substantial agreement among the MCPH and even higher levels of the GCA, and among the participating donors, that the GCA's health goals cannot be attained without developing within Afghanistan a system or combination of systems through which villagers may obtain minimal health education and services. These are the Afghans living in widely scattered "settlements" outside of the BHC catchment areas.

We have learned from recent research and surveys (ADS/SUNY and MCH Parwan) that rural people seek and pay for health care from a variety of sources. In the Parwan survey, for example, it was found that pharmacies account for about one-third of all medicines obtained by the households, and that the pharmacists or compounders must often assist with diagnosis and prescriptions. Small store keepers (dokhans) usually stock a minimal supply of medicines and give advice on their use. The midwife (dai) is assumed to be a part of the traditional health service in all of Afghanistan -- at least she has been found in the areas in which surveys have been made. Barbers, injectors, bonesetters, and religious teachers all play some role in the informal, traditional health system.

It is important to note that the people seek the services of these people when in need. The services are almost exclusively curative. Examples of villagers seeking and paying for preventive care are few perhaps only for smallpox vaccinations and for infertility problems.

The AHDS models to be designed and tested in Phase I will take into account the existing patterns of health behavior to the extent these are known. What is positive will, of course, be reinforced. Whereas almost all traditional care now is in the pattern of people seeking services (curative), we plan in the AHDS models to introduce the concept of services seeking people (preventive and curative). Given existing patterns of behavior, it seems absolutely necessary to obtain confidence by

providing a minimal and effective curative service. The workers delivering services, if they are effective, will gain the confidence of their clients and thus be able to teach certain fundamental health habits -- personal hygiene and community sanitation; care and feeding of children; nutrition of mothers and children; and family planning concepts.

Over the past year or more, the MSH team and officials of the MCPH have developed working papers on AHDS designs, and much of what is in this section is based on these papers. We have seen, in this process, the development of several assumptions, one of which is that villagers will be more likely to accept services and education from persons known to them. For villages having no commerce at all, this would be a village resident. While this is consistent with our knowledge of Afghan culture and village life, it is still an hypothesis to be tested.

Geography will be one important factor in determining which AHDS models to test. In an area including a number of settlements, but no commerce, the volunteer Village Health Worker (VHW) model appears to be the most promising. In larger villages, or settlement clusters, in which there is commerce used by all, a storekeeper might be the most appropriate dispenser of health education and services. (A "Community Entrepreneur Model".) We would envision situations where these could work in combination. And, lastly, there will be areas where transport is sufficiently developed that BHCs can be expected to play a fairly direct role in training and supervision of the workers in AHDS models, without, however, having the direct "outreach" role which they have within their BHC catchment areas.

For villages to participate in the AHDS models would require their agreement on the program, on the selection of the delivering agent(s), on the collective responsibility for VHW compensation, and on the non-governmental nature of the program.

Objectives

Through the AHDS models we expect to answer a number of questions: (1) Can AHDS workers be recruited, and trained and motivated to deliver services which are effective and accepted by the people?; (2) Can viable purchase, pricing and cash/materials systems be developed and sustained at the AHDS levels?; (3) Are the training and supervising designs adequate?; (4) Are the services selected for AHDS trials the most important and acceptable to the people?; (5) Are other delivery agents more likely to be accepted than those chosen for the Phase I AHDS models?; and (6) Do the results of the pilots justify either further trials or a phased expansion for the whole nation?

It is planned that the AHDS models begin with only the most simple, basic tasks to be performed. Simple diagnosis and treatment (or referral) of only five or six diseases would be taught: (1) Gastro-enteritis and childrens' diarrhea, (2) conjunctivitis and trachoma, (3) "aches and pains", (4) skin infections, (5) worms, and (6) bronchitis and pneumonia.

Additionally, a VHW would provide advice on childhood malnutrition detection and prevention, weaning practices, hygiene particularly as it relates to diarrhea, first aid, food storage and preparation, family planning and contraceptive service.

AHDS Worker Qualifications and Training

Basic VHW qualifications would be interest, maturity, intelligence, and acceptance by both villagers and the village headman. The VHW would work only in the village (settlements) where she is known. Training and supervision must take into account that some of the VHWs will be illiterate (female literacy in rural Afghanistan is less than 1%). Training of VHWs will, in most instances, have to be done in the villages because some will not be able to leave their homes for training programs at the Regional Training Centers. It is yet to be determined how many families could be served by one VHW, and whether it is desirable/necessary to have two VHWs working as a team (possibly a husband and wife team).

The selection of a community entrepreneur would require somewhat similar criteria. The person should be interested, preferably already handling basic medicines and wishing to learn more about them. His selection should be approved by the villagers and headman. He should be literate.

Training will be both "on site" and, where possible, in the Regional Training Centers. Supervision will be from BHCs. Follow-up, in-service training must be at frequent intervals to insure support and to monitor effectiveness.

9. Programs of other Donors related to the Basic Health Services Project

The representatives of WHO, UNICEF, UNFPA and UNDP have participated in varying degrees to the development of this paper. WHO, UNICEF and UNFPA have critiqued earlier drafts. They have discussed the relationships of their project activities, both ongoing and planned. They have shared drafts of their program documents.

WHC

WHC's 1976 malaria program is currently budgeted at $380,000 -- the projection for 1977 is tentatively $250,000. They provide advisory services, training and some commodities. They are not, and do not plan to be, the major donor for insecticides. This program works through the relatively strong vertical MOPH malaria organization which has more autonomy than any other within the Health Ministry. The malaria situation in Afghanistan has been relatively stable, but the resurgence of malaria on the sub-continent in 1975, the possible appearance of resistant vectors, and the escalation of costs for insecticides are all causing concern in the MOPH. This concern has not yet stimulated serious thinking about the integration (or even close coordination) of the malaria program with other programs such as BHC; however, donors are encouraging the MOPH to think of the BHC system as a key component in a national malaria maintenance program. The position of sanitarian in the BHC staffing pattern could permit a fairly easy transition. WHO's 1976 and 77 tuberculosis (TB)programs provide $120,000 each year. This is for advisory services, training and commodities. The program is almost exclusively within the MOPH's TB hospitals.

Additionally, WHC provides advisors in several other areas: Advisors in the areas of BHC and Family Health are the ones most directly related to this project. A Nursing Advisory project is expected to phase out, there being only $13,000 provided in 1976.

WHC is currently developing an immunization program to which other donors will be asked to contribute. It is planned to begin in Kabul City and move, in time, to rural areas.

UNICEF

UNICEF s major effort is in health. Unofficially, UNICEF projects a program of $6,000,000 from the second half of 1977 through 1982, of which $5 million is for health and over half for UNICEF's potable water project activities. UNICEF's focus in coming years is to be upon: infant mortality and morbidity; female mortality and female education (status of women). In Basic Health Services, its 1976 program is approved at $512,000 of which approximately 90 percent is for commodities, e.g. equipment and supplies for new health centers. For the first half of 1977 the budget is $115,000. The UNICEF potable water program for 1976, including the earmarked Swiss contribution, is $638,000. For the first

half of 1977, the budget is $290,000 (also including Swiss).

UNICEF's BHC equipment and water projects are the two most important projects related to this USAID BHC project. UNICEF gives first priority to providing potable water at the basic health centers and schools (also a USAID-assisted project). Their implementation plan is to be closely coordinated with this BHC implementation plan.

Also important is the UNICEF vehicle procurement and maintenance project (1974, 75 and 76). Approximately 200 vehicles have been turned over to the MCPH in the past year, a number more than sufficient to insure there being one at each BHC. UNICEF will continue its TIMC project (Transport and equipment maintenance training).

UNFPA

The current UNFPA projects are less directly related. Its main effort is in demography. It has a commitment of $525,000 to assist with the first national census and with registration; the advisors are in country and the census design has been completed. Assistance from UNFPA includes advisory services and commodities, e.g., vehicles. UNFPA has a Family Planning education project and is planning a Family Planning services project. These are relatively modest (approximately $400,000 over three years) and "pilot" in nature. Further work may be undertaken in infant mortality studies.

WFP

The World Food Program (WFP) was over $5,000,000 in 1975 and is expected to continue at this or a higher level. The budget is largely for imported food commodities which are distributed through several channels including the Basic Health Services. While USAID has observed that this food distribution at the BHCs disrupts other health activities and demands the time of medical and paramedical personnel who might be better utilized, we also recognize that the program does encourage people to come to centers where, in time, they may be motivated to make better use of the health services.

U.S. Peace Corps

In past years the U.S. Peace Corps has provided a variety of personnel to the Ministry of Public Health. Currently almost all such PCV assistance is being phased out ("suspended" may be the more accurate word).

The reasons are not thought to be related either to the need or the quality of PCV assistance. The Peace Corps country Director would be receptive to renewed requests from the MCPH, especially for the ANM program, and discussions among Peace Corps, MCPH and Ministry of Planning are continuing.

CARE-Medico

This program is many years old and will continue. It is narrowly focused. CARE-Medico provide U.S. specialists to teach Afghan physicians in one of Kabul's major hospitals. This is a well administered program and one which has been highly regarded by successive Health Ministers. CARE would like to develop programs in nutrition and nutrition training and its discussions with the MCPH are continuing.

Other Donors

Among major donors are the USSR, Peoples Republic of China, Federal German Republic, India and others. OPEC countries have funds available for the health sector.

Their programs in no way duplicate USAID's proposed assistance. China and India have helped with hospitals and continue to do so. The USSR assists with malaria and other programs. The FRG last year assisted with insecticides for the malaria program. Iran is understood to be willing to provide substantial sums for the malaria program in coming years, but no agreements have been concluded.

D. EVALUATION AND BASELINE DATA COLLECTION

1. Evaluation

As indicated elsewhere in this PP, no problem is as important in Afghanistan's development milieu and perhaps as poorly understood as the convoluted interrelationship among improved health, population growth and economic development. Extant methodologies for evaluating these interactions have proved to be oversimplifications or too complicated for practical application in the Afghan environment; e.g., computations of the direct and indirect costs of illness (mortality/morbidity), computations of the impact of health services on the economic value of human life, birth-life-death models, and assessments of the impact of health services projects using cost-benefit analysis. The fact is that the effects of "better health" (presumably to be derived from health care delivery systems) cannot be

adequately quantified so as to become a manageable part of the three dimensional matrix of health, population growth and economic development. As Taylor and Hall stated:*

> (In) the dynamic equilibrium between the three major components of this matrix, optimum progress occurs when all elements move forward together, the general objective being improvement in the quality of life. Neither economic development nor health of itself is a sufficient goal. . . The general concept of an improved quality of life obviously cannot be readily measured. The social components of a better quality of life are benefits in themselves, but, more importantly, they can be used as instruments of change or as means of increasing productivity. Better health is both an object of and an instrument for development. In this process, population growth is an intermediary force of increasing relevance."

This statement suggests a synergistic relationship between health and other development sectors, and to the extent this obtains, constraints on one sector can and often do act as constraints on health improvement, or vice versa. For example, dramatic economic changes have occurred when the amount of land available for cultivation has been increased by removal of a health constraint such as malaria.

These constraints to understanding the impact of health services projects on the population they serve, in turn impact on the Mission's ability to plan, implement, monitor and report on any but the simplest, most quantifiable and unambiguously observable indicators of project achievement and success, particularly given this project's relatively short term implementation span, i.e., 28 months. The design of this Basic Health Services project is therefore meant to be modest and yet it is perhaps quite complicated when one considers the limited capacity of the GOA to successfully implement social service projects.

Taylor, Carl E. and Hall, Marie-Francoise, Health, Population and Economic Development, Science, 157, 651, 1976.

Phase I Indicators

An attempt has been made to provide simplified, measurable indicators in the logical framework and the Project Performance Tracking (PPT) network up to the purpose level. There are two dominant characteristics which most if not all of the indicators share up to the purpose level, and which deserve mention: (1) the probability of showing change during the life of the project; and (2) the practical measurability of the indicator for purposes of project evaluation. Other criteria applied to the selection of indicators were plausibility (e.g., credible, causal relationships), indpendence (e.g., purpose level, end of project status indicators were made independent of these conditions necessary and sufficient to achieve the purpose), and targetability (indicators were chosen which showed both a time and/or a magnitude when the desired change or action should be observable).

The PPT network relates Critical Project Performance Indicators (CPIs) to each other and to time and as such will provide the basis for which the regularly scheduled evaluations of actual versus planned performance will occur. An attempt has been made to schedule the two project evaluations at intervals when a sufficient number of CPIs should have occurred to make evaluation useful and meaningful as suggested below:

1. June, 1977 - Approximately one year after anticipated project start up. Will allow for project design correction, if necessary.

2. April, 1978 - Approximately six months before Phase I termination. Will allow sufficient time for evaluation results to be used in a Phase II Project Paper, should evidence warrant.

2. Baseline Collection

Output to Purpose Level

The clinic record system being established by this project will provide data to be used to partially measure achievement at the output and purpose levels for this and perhaps subsequent phases. The purpose statement and purpose level end of project status (EOPS) indicators which the clinic record system will address follow:

PURPOSES	INDICATORS
Basic Health Services (BHS) To provide basic health services with emphasis on services for women and children to 830,000 persons living in 50 Minor Civil Divisions within four of Afghanistan's six Health Regions	A. Each Operational BHC provides: (1) diagnosis (2) effective treatment for 80% of diseases presented (3) referrals to provincial hospitals (4) FP education and services (5) midwifery and MCH service (6) health education for nutrition and sanitation (7) vaccination services by ANM and vaccinator B. Average BHC attendance 50 patients per day. C. The proportion of women and children seeking health services increasingly corresponds with their numbers in the target population.
Alternative Health Delivery Systems (AHDS) To provide two or more Alternative Health Delivery Systems (AHDS) which when widely replicated will provide a minimal health service for those persons who will not have reasonable access to a BHC.	Systems of proven effectiveness developed which are capable of being replicated at affordable cost.

The outputs and the output indicators which the BHC information system will address follow:

OUTPUTS	INDICATORS
BHS	**BHS**
1. Four (4) operational regional offices supporting 50 BHC and AHDS experiments	1. and 2. BHCs operational in project areas as follows:
2. 50 operational BHC's	End FY 76 / FY 77 / FY 78 Rank I - 4 4 Rank II - 13 42 Rank III - 1 4 18 50
3. ANM School operating at optimal level	3. A minimum of one ANM on duty at each BHC in project area.
4. BHC personnel trained and assigned	4. End FY 76 / FY 77 / FY 78 -Physician or Senior Nurse - 18 50 -ANMs 18 50 Paramedical personnel - 36 100
5. BHC supply systems expanded	5. Drug (medicines) formulary for BHC adequate for illnesses treated, and inventories maintained systematically.
6. Client record system operating	6. Periodic Provincial, Regional and Ministry summary reports based on data provided by BHC's.
A.H.D.S.	**A.H.D.S.**
1. Two or more AHDS designed and approved for testing	1. Two or more AHDS tested
2. Elements of one or more AHDSs demonstrated effective and financially and administratively feasible.	2. These elements are: A. Ability of MCPH to recruit workers B. Training courses developed and held. C. Significant proportion of target population in contact with AHDS workers

(this will be quantified more precisely in the model designs)

D. Functioning supply system

Obviously, the BHC information system cannot perfectly address each statement at the output and purpose levels and in some cases can provide no information at all. In these cases, the PPT and other means are useful. At first glance, however, the PPT network would seem to suggest that very little output and purpose level indicator data would be generated by the client record system by the end of the project, e.g., CPI #27 shows that in the final month of the project, 38 Basic Health Centers will be made "operational" thus seemingly disallowing the possibility of collecting clinic data during the life of the project for a majority of the BHCs which, if this were the case, would disallow meaningful measurement of the end of project status. It is useful to point out that by the April 1978 evaluation, 9 new BHCs will have been made operational, 3 presently incomplete BHCs will be operational and there will be experience with 20 rented BHCs. Finally, it is useful to remind that CPI's are indicator points to monitor performance standards and are not the operational checkpoints against which actual implementation is carried out. Thus, some of the CPI completions will likely occur before their reporting dates allowing collection of a greater amount of client data than would seem apparent.

Purpose to Goal

In spite of the formidable methodological obstacles imposed on the collection of reliable baseline data for health services projects, the need for measuring probable project impact on health indicators of a long-term goal level nature cannot be ignored. Extant rural health surveys of Afghanistan do suggest a list of questions, the answeres for which theoretically have a possibility of measuring change over the long run (long run is defined here to mean a possibility of occurring during the implementation of subsequent project phases and which questions and answers are otherwise important for long term BHS program decision making). This list would appear to impact on the projects goal level statement only, which is:

> "To improve the health of the Afghan population not now having access to effective health education and services due largely to circumstances of residence, poverty, sex and age. These are mostly the rural people who comprise 85% of the population."

These questions include:

1) What are the perceived health problems which rural people identify?

2) What do they perceive as their priority health needs?

3) What are the most feared health problems?

4) What knowledge exists of practical actions to meet health problems?

5) What access do they have to effective sources of health care?

6) What is the magnitude of the rural family investment in health and what fraction goes to potentially effective use?

As stated earlier, answers (crude baseline data) in various forms for all these questions exist for Afghanistan, and this data forms a potentially practical, if not the only, basis on which follow-up studies can be carried out at reasonably short, perhaps biannual intervals. Practical survey instruments can be developed and implemented by Afghan interviewing teams, either from the MCPH or institutions such as the Kabul University Research Center. The Parwan Village Health Survey (#1 below) showed that concisely focused rural surveys can be planned, conducted and analyzed within less than six months at reasonable cost.

It should be understood, however, that the available studies have used different methodologies, have taken their samples from widely separate areas, differing ethnically and linguistically but which do reflect the entire variation of disease patterns in the country (disease incidence patterns are key to measuring the project goal as shown in the logical framework). The studies follow:

1. "A Field Survey of Health Needs, Practices and Resources in Rural Afghanistan", July 1975. prepared by Management Sciences For Health.

2. "Family Health Care, a Rural Health Care Delivery Scheme", prepared by Rex V. Blumhagen, M.D., and Joanne Blumhagen, M.D. under the auspices of the Medical Assistance Program (MAP) in cooperation with AID, 1974.

3. "Preliminary Report on Infant and Early Childhood Mortality Survey in Greater Kabul", prepared by WHO/UNICEF with the Ministry of Public Health, September 1974.

If the likelihood of a Phase II project obtains in early CY 1978, then a follow-on survey instrument will be designed, field tested and implemented sufficiently early in 1978 so that the results would be useful to the preparation of a Phase II PP. In this case, the list of questions given above would be reappraised for their technical use for assessing long term project impact, the list of indicators at the goal level now provided in the logical framework would be reevaluated as well, and other potential indicators would be explored. Funding wise, it is presently thought that a 1978 survey could be completed using only local surveying resources, and so no funds have been shown in the project budget since necessary funds could be programmed for this purpose from the Mission's Trust Fund budget.

PART 4: PROJECT ANALYSES

A. SOCIAL ANALYSIS

1. The Beneficiaries and their Characteristics

Our knowledge of Afghanistan is considerable, but paradoxically, limited. We are intellectually aware of Afghanistan through writings and personal travels. We see and understand Afghanistan with western biases. The actual experience of village life, which would be necessary to satisfy the promise of this section's title, is an opportunity afforded to few. We know the rural culture is rich in terms of independence, pride, achievements in agriculture and animal husbandry, in creative crafts and arts, in family and community loyalties, and in spiritual inspiration. It is a culture which, while perhaps not at peace with its demanding environment, has found rational ways to accommodate itself to it. It is an ancient culture, probably changed little by its contacts with outside ideas and products. It is a strongly male-dominated culture. And, while there are probably more similarities than differences among its peoples, it is definitely a heterogenous society comprised of several ethnic groups. A common response by an educated Afghan to a foreign query about culture or politics is, "Read the Koran. Do not think of us in terms of east and west, left and right, oriental and occidental. Read the Koran."

Thus, this section is limited, but a profile of Afghanistan follows, in "western" terms.

2. Urban Afghanistan

The Afghan Demographic Survey (ADS) Report divides the Afghan population, demographically, into three categories: (1) major urban - 8 cities and towns, ranging from 28,000 to 597,000; (2) minor urban, 53 cities and towns, ranging from under 5,000 to 25,000; and (3) rural, which is everything else (85 percent). Of these 53 "minor urban" it is noted that 21 have less than 5,000 population -- the total for all 21 being only 50,000. Additionally, it is estimated there are 1.1 million nomads.

"Urban" even in the capital city of Kabul does not connote urbanization as commonly understood in the more developed countries. Potable water for all of Kabul is hoped for by the end of the seven-year plan beginning this year. Sanitary waste disposal is not forecast in the immediate future. Schooling beyond the 8th grade, under the new

Education Reform Law, is not a right, but a privilege to be earned by only 50 percent of those who complete the 8th year. Upward economic mobility through access to jobs in industry is severely limited by the lack of major industry. Electricity is not available to all, even in Kabul. There is radio, but not television. There are periodic shortages of most consumer goods as well as such essentials as spare parts to keep machinery working, and of medicines. The urban economy is still a "bazaar" economy with excessive numbers of proprietors competing for consumers' limited resources. Savings which would permit increased capital investments are not likely to rise quickly in this bazaar economy. Of the "major urban" areas in the provinces, few have electricity on a full-time basis. Unlike in Kabul, there are almost no modern specialty hospitals, Thus, even in these "major urban" areas, the culture is more nearly "rural" as the term is defined in more developed countries. The "minor urban" towns are, by most international definitions, "rural," Electricity is uncommon or non-existent. The bazaars are limited - often to weekly trading for many items. Trades and specialties are few. Medical facilities are minimal or non-existent.

3. Rural Afghanistan

This project will serve the rural population. Except for four Rank I centers located in Provincial capitals, the health centers and the alternative village health systems will be for the Afghans living outside of either "major" or "minor urban" areas as defined in the ADC/SUNY Report. As definitions of urban are different for Afghanistan, so, to some degree, are definitions of "rural." Administratively, Afghanistan is divided into (six) Health Regions (Regional boundaries conform to Provincial boundaries) in each of which there are three to six Provinces. There are twenty-six Provinces in Afghanistan, and these are divided into Minor Civil Divisions (MCDs), called Woleswalisand Alequadaris. (Roughly equivalent to counties, but having some characteristics of townships.) There are 325 of these in Afghanistan. Usually an Alequadari is a part of a Woleswali. Sometimes Alequadaris in the more densely populated parts of the country are more populated and more developed that Woleswalis. When the MCDs were first geographically and administratively designed, it was intended that the MCD administrative center (county seat) be within reasonable access to the population of the MCD. However, due to the ruggedness of the terrain, this is often not the case; and "reasonable access" means within ten kilometers of a BHC. Most often, this is ten kms by horse, donkey or walk. The MCPH estimates roughly that at least 50 percent of the villagers of most MCDs are not, by this definition, within access of the BHC in the MCDs main town. It is for these more isolated persons this project's AHDC models are being designed and demonstrated.

Estimates of the total numbers of villages in Afghanistan range from 20,000 to 30,000. Using ADS/SUNY data, this would indicate an "average" village size of between 470 and 705 persons; however, in fact, there is a far greater range and thousands of the villages are more nearly "settlements" comprised of ten to fifteen different family dwellings. These may be widely scattered, many kilometers from any other "settlement" or village as in the higher mountain pastures, or they may be very close, as in a watered place in a desert area where separate clusters of settlements tend to be within a few kilometers of one another. Similarly in the extensive mountainous areas of the Hindu Kush, there are narrow, fertile strips of land next to the streams which are running between the ranges, and settlements will be strung out along these narrow valleys. Where these valleys open onto larger expanses of land there is likely to be a larger town, formed as a result of commerce between the valley settlements and the more distant cities. Often, this commercial center is also the MCD administrative center.

In the smallest of the Afghan villages there is little specialization and commerce. The smaller would not have even a part-time store selling such essential commodities as matches, soap, tobacco, aspirin, needles, etc. To obtain these goods the male members of the household travel, usually by foot unless their village happens to be near a road with country bus and truck service, to the nearest village having a store. The usual preference would be to go to a weekly or monthly bazaar in the nearest town and to take items for trade (usually agricultural produce, but often crafts made largely by the women and children. Depending on the location and the season, wild fowl and fish would be taken to market.)

A woman, after she is married, does not leave the family compound without the permission of the senior male member of the house. She seldom goes shopping, for this is a male chore. The rare outings she has are limited to visiting family and friends on special days, as Eid, and attendance at weddings and funerals.

Volume I of the ADS/SUNY Report reveals that fifty percent of all women aged 15 to 19 are married. Between the ages of 19 and 49 years, 80 percent are married; and, in the years of highest fertility, 25 to 39 years, 95 percent are married. It is also interesting to note that while 78 percent of all males aged 55 and over are married, only 24 percent of females are married in this age group.

The literacy rate for all of Afghanistan is estimated at 11 percent; for urban areas 26 percent, for males 19 percent and for females 3 percent. In the rural areas to be served by this project,

the literacy rate is 9 percent; for males 16 percent; and for the primary beneficiary group, females, only .6 percent. The "ever attended school" statistics for these rural women is 3.7 percent. Until experience teaches otherwise, it must be assumed that illiteracy includes not only the written word, but pictures and other graphics. Village health training will have to take these facts into consideration.

Attitudes toward health and medicine are largely determined by traditional folk biology and folk medicine, which, in Afghanistan, consist of an attenuated understanding of Empedocle's theory of the four humors together with related use of herbal medicine and dietary practices. The cumulative effect of these beliefs is that health is considered to be the natural state, and disease a result of humoral imbalance or supernatural interference.

When a man is ill, he goes to one of the traditional practitioners, a hakim or a doctor, and describes his symptoms or self diagnoses his illness, and is given herbs, a medical prescription and a dietary prescription. He is not usually given physical examinations or tests of any kind. Almost all visits are made for curative assistance.

A few examples do exist however where preventive medicine is practiced. One example of preventive medicine, which is a known instance of awareness of germ theory, is the traditional practice of variolation, infecting smallpox scab material into a healthy person to prevent smallpox.

Where modern medical services are available they are utilized as another option among the traditional sources of cure. The expectations of people as to how a doctor should act professionally have to some extent shaped the practice of modern medicine. Because of the relatively high cost of private, modern medical care and modern drugs, people tend to use the traditional sources of medical assistance before resorting to the more expensive modern medicine.

4. Beneficiary Selection and Participation

It is within the above rural context that this project intends to deliver health education and services. For half, this will be through BHCs in which all the staff except the ANM will have had a minimum of twelve years of school and, as a consequence, considerable exposure to Afghanistan's urban culture. For the 50 percent in more remote locations, a method or methods must be devised to deliver health

education and services through a worker who, in some instances, will herself be unschooled and illiterate.

This rural group has been selected because it is the neediest in the nation. It is, also, the large majority of the population. The GOA's policy is to extend all social services, now restricted to the few urban areas, to this rural population. Thus, the USAID's new projects, Rural Primary Schools, and Rural Works, and Central Helmand Drainage focus on these beneficiaries. During the initial two to three years of these new, rural projects, USAID and the GOA are working together to demonstrate that in a limited area, over a limited time, the objectives can be met. It is planned to carry on these activities in subsequent phases until national coverage is achieved and the GOA can sustain the programs with its own resources. The "spread effect" is designed in from the beginning -- often, as in the case of this project, already spreading out from previous efforts of the GOA and foreign donors.

Participation in the project by the beneficiaries has not included, directly, their participation in this planning stage, except as this planning has been dictated by the needs of the groups identified in pilot models in recent years. From GOA experience in other rural projects, we have learned that participation by the beneficiaries is intense at certain stages. The selection of the site for a BHC will require the full consent and participation of the community, and will require by one or more families the giving up of a piece of land for the center. As was learned in the Parwan demonstration, the beneficiaries are not modest in the demands they place on the performance of the BHC personnel. Where the greatest participation is expected, indeed required, will be in the AHDS models. For these models to be successful will require that the community assist, (a) in identifying their health needs, (b) in setting the health education and services priorities, (c) in selecting the method(s) by which these services will be provided, and (d) identifying specific, or categories of, personnel to carry out the work for the community.

5. Health Information

The primary emphasis of the project will be preventive measures. For these services to be effective a major educational effort will be necessary to convince the population that they are not the passive victims of capricious humors or evil spirits. The cultural preventive practices will assist in the conceptual transition as it relates to vaccinations, which, due to a mass smallpox campaign, have already become an accepted practice.

Nutrition, environmental sanitation and hygiene will, however, pose problems. Because of accepted dietary restrictions, eggs and other nutritious foods are not given to infants. Foods, in general, are viewed in terms of their influence on the humors and their effect on the palate; the concept of nutrition and a balanced diet is virtually unknown. An effective nutrition program will have to alter these traditional beliefs and practices.

Islam, the religion of 98 percent of the population, stresses ritual cleanliness which requires ablutions at least daily. The traditional belief that running water is clean allows the same stream to be used for a variety of purposes some of which pollute the water. A vigorous health education program along with elementary sanitary engineering projects will be necessary if the goals of reduced infant mortality and improved quality of health are to be achieved and sustained.

One of the most important cultural impacts this project will effect is the extension of health services to women, provided by women paramedicals. While the status of women in the cities has improved in recent years markedly, the rural situation remains largely unchanged. The provision of health services to women will improve their health and reduce maternal mortality. Equally important, it will promote a subtle but basic change in the attitude of rural women towards the role that women can play, as they see professional female paramedicals working as equals with male colleagues.

Major changes may take as much as a generation but the basic health center system and its personnel and more important the village health workers will be an exigent cause of these changes.

B. FINANCIAL ANALYSIS

1. Macro Overview

Until the last very few years, the fiscal effort of the Government of Afghanistan was one of the weakest in the world. Nor was the effort increasing. Growth in domestically generated revenue had practically stagnated even in nominal terms and revenue was little more than large enough to finance ordinary expenditures. Consequently, the Government's ability to finance a development program, including

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"Social attitudes, beliefs and practices that affect the nutritional status of pregnant women, lactating mothers and young children in three Afghan villages," Md. Afzul Pakmal, Kabul Univ. 1975 (Annex 5)

the matching of funds required of foreign assistance, was severely hampered. The condition was serious enough to lead some foreign experts and Afghan officials to declare that inadequate domestic revenue was the main constraint to the country's development and they assigned to increased government revenue a priority second to none.

Recently, however, substantial change has occurred in the government's fiscal effort. A high priority has been placed on increased domestic resources to the government in support of an accelerated development program. Internally generated revenues have been growing very rapidly, [1] as have government savings, [2] with the implementation of enforced tax collections, improved tax rolls, altered tax rates and added new taxes. Increased prices and quantities of exports have also contributed to the rising revenue. At the same time, donor aid commitments have been rising sharply, partly due to assistance programs of new donors (mainly OPEC countries) but also to increased assistance from some of the traditional donors. Disbursements from the new commitments have thus far been rather limited because of the time required to identify, prepare and implement projects. [3]

Another recent development bearing on the country's ability to finance development projects is the general willingness of donors to finance a larger proportion of total project costs, including local currency costs. [4]

1/ With 1970/71=100, the indexes of domestic revenue, 1970/71-1975/76, are 100, 102, 107, 123, 179 and 213 respectively. While the index for 1975/76 is based on the revenue projected by the 1354 State Budget, 9-months receipts indicate that revenue will be close to the projected level.

2/ With 1970/71=100, the indexes of current surplus, i.e. domestic revenues less current expenditures, are 100, 57, 82, 87, 524, and 548 for 1970/71-1975/76 respectively. The index for 1975/76 is of course an estimate.

3/ With 1970/71=100, the indexes of total development expenditures, including project assistance, are 100, 110, 144, 120, 140 and 313 for 1970/71-1975/76 respectively. The last index, derived from the 1354 State Budget, will not be achieved but should end up in the neighborhood of 200.

4/ The ratios of (a) GCA development expenditures out of its own budget to (b) project assistance were 1.41:1, 1.28:1, 1.25:1, and 1.24:1 for 1971/72-1974/75 respectively. The 1354 State Budget shows the ratio falling to 0.80:1 in 1975/76. The latter ratio is not likely to materialize, however, since the shortfall in project assistance is likely to be substantially larger than the shortfall in GCA development expenditures out of its own budget. Project assistance is valued by the GCA at Afs 45.3/dollar.

While the short-run trend of domestic prices if upward, [1/] the Government's reliance on deficit financing has not been excessive, with growth in domestic liquidity having contributed only marginally to the price rise. [2/] Rather, the price increase mainly reflects lower domestic production of some major food commodities, especially wheat since the 1973 harvest, and generally higher world prices for commodities and services imported and exported by Afghanistan.

The net foreign reserves of the banking system continue to grow [3/] and the free exchange rate vis-a-vis the US dollar has been quite stable, although drifting downward, for the past two years. [4/]

The servicing of external debt placed a substantial burden on the country in the past. The relative burden of servicing such debt has been falling over the last few years, however, as export earnings have been moving sharply upward. [5/] Additionally, the country's largest creditor, the USSR, has granted sizeable (almost $135 million) debt servicing relief spread approximately equally over a six-year period beginning in CY 1975. As a consequence of these developments, the debt servicing ratio may be no more than 12-13 percent in 1975/76, less than half the size of the ratio four years ago.

1/ For the National Price Index, with third quarter (Sep/Oct, Oct/Nov and Nov/Dec) 1972/73=100, the indexes for the third quarters of 1351-54 (1972/73-1975/76) are 100, 101, 122 and 123 respectively. The Index includes 24 commodities (no services) and gives cereals a weight of 58.1 percent.

2. The annual growth in domestic liquidity (currency in circulation plus demand, time, savings and foreign currency deposits) amounted to 7.2, 7.5, 19.9, 12.9, 9.5 and 12.9 percent respectively for 1970/71-1975/76. The last figure is for 9 months of 1354 (1975/76) and is a result of large balance of payments surplus so far this year, not to deficit financing. In fact, the national government (including official entities like the Food Procurement Department) is currently running a slight budgetary surplus.

3/ Including bilateral trading balances with Communist countries and inconvertible foreign exchange (mostly Indian Rupees), the net foreign reserves of the banking system increased from $34.88 million at the end of 1349 (Mar 20, 1971) to $135.92 as of Dec 20, 1975. With reserves of 3/20/1971=100, the indexes, March 20, 1971-March 20, 1975 and Dec 20, 1975 are 100, 153, 130, 203, 237 and 390 respectively.

4/ The average annual free market (bazaar) exchange rates, 1970/71-9 months, 1975/76 were: 85.28, 85.28, 80.00, 80.98, 56.86 and 55.23 Afs/dollar respectively.

5/ With 1970/71=100, the indexes of total exports (current dollars, f.o.b.), 1970/71-1975/76, are 100, 116, 146, 186, 247 and 281 respectively. The last index is an estimate.

In summary, while the development targets of the GOA are now substantially more ambitious than in the recent past, it would appear that financing will not be a major constraint to the overall development effort. Domestic and anticipated foreign resources will be sufficient, it would appear, to support the level of development activity that can be achieved by the GOA over the next few, say five, years. The critical constraint will be that of identifying viable projects and their planning and implementation.

2. Total Expenditures for Public Health

The following section attempts to arrive at a ball-park estimate of total health expenditures in Afghanistan, by both the private and public sectors. Expenditures by the medical faculties of Kabul University will be assigned to public health expenditures along with those of the Ministry of Public Health.

Household Expenditures

On the basis of a sample survey, the MSH team estimated that average per capita expenditures (including transportation and all medicine purchased) by private persons for all health activities amounted to Afs 151 in 1974/75. The survey was made in Parwan Province where health services are more accessible than they are in most provinces. The figure is likely high for the country as a whole.

Expenditures by MCPH

For the period 1970/71-1975/76, expenditures by the MCPH grew at an average rate of almost 12 percent annually and per capita expenditures by over 9 percent. While no satisfactory price deflator exists, the National Retail Price Index moved from 277 in the third quarter of 1970/71 (1349) to 283 in corresponding quarter of 1975/76 (1354). 1/ It would thus seem that real per capita expenditures by the MCPH are growing rapidly. Yet, as

1/ There was a sharp jump in 1970/71 from prior year. The respective third quarter indexes, 1969/70-1975/76 are 196, 277, 308, 230, 232, 280, and 283. Thus index is rather volatile and movement is mainly a reflection of changes in cereal, especially wheat, prices. The sharp upward movements in 1970/71 and 1971/72 were a result of a severe drought.

shown in the following table, MOPH per capita expenditures are still very low.[1/]

Mid-Year	Population (millions)	MCPH Expenditures			
		Total		Per capita	
		Ordinary (afs millions)	Total (afs millions)	Ordinary (afs)	Total (afs)
1970/71	11.23	139	196	12.4	17.5
1971/72	11.48	165	213	14.4	18.6
1972/73	11.74	186	265	15.8	22.6
1973/74	12.00	192	276	16.0	23.0
1974/75	12.28	204	288	16.6	23.5
1975/76	12.56	243	342	19.3	27.2

$ US 1.00 - afs 55

While on a per capita basis, MCPH expenditures are very low, on the basis of the people reached -- perhaps a maximum of 5 percent of the population -- the average recurrent cost was afs 393 per person in 1974/75 and the average total cost was afs 557. While GDP figures for Afghanistan clearly contain much guesswork, some sources place current GDP at something less than afs 100 billion. On this estimate, total expenditures by the MCPH amounted to less than one-half of one percent of GDP in 1974/75.

Public Sector Expenditures

Ordinary expenditures by the MCPH amounted to afs 204 million in 1974/75. This figure does not include a number of expenditures by the Central Government in support of the MCPH, the most important being for fringe benefits to government employees. Such benefits, which include wheat subsidies, contributions to social security, lunches and bus services to and from work, are increasing rapidly and now amount to 20-25 percent of salaries. Such expenditures would add another afs 20 million (personal services account for 46 percent of MCPH ordinary expenditures) to the ordinary expenditures of the MCPH.

1/ Based upon a recent demographic study, 12 million is a reasonable mid-1352 (1973/74) population estimate for Afghanistan. Projecting forward at an annual growth rate of 2.3 percent and backward at 2.2 percent gives population estimates shown in the table.

While the training of medical personnel at Kabul University medical faculties could be considered an investment, such expenditures are classified as ordinary by the GOA and will be done so here. Non-instructional expenditures, i.e., general administration, institutional services (libraries, gymnasium, e.g.) and auxiliary enterprises (dorms, health services), are distributed proportionately on the basis of enrollment. The proportion of the University's ordinary expenditures allocated to the Medical faculties amounted to afs 73 million in 1974/75. Personal services account for 53 percent of these expenditures and the Central Treasury also contributes to these employees' fringe benefits. This would increase governmental expenditures for KU from afs 73 million up to afs 85 million. While there are additional expenditures by Government ministries and agencies (e.g., the Ministry of National Defense), the above would account for most recurrent expenditures. These ordinary expenditures of, say, afs 325 million (afs 308 million plus 5 percent for other) amounted to 3.2 percent of the Government's domestic revenue (afs 10,250 million) in 1974/75 and constituted 4.4 percent of total ordinary expenditures of afs 7,329 million.[1/] They amounted to 0.3 percent of GDP and to an average of afs 23 per capita. When average per capita expenditures of afs 151 by private persons is added to the above, this gives a total of afs 2,180 million which is 2.2 percent of GDP and afs 177 per capita. While ordinary expenditures by the GOA are likely understated (and private spending overstated), one has to conclude that at least nominally the expenditures are not large relative to domestic revenue, ordinary expenditures and GDP.

Development expenditures, including project assistance, by the MCPH, KU's medical schools and the Ministry of Defense (for hospitals) amounted to an estimated afs 206 million in 1974/75. This is 4.9 percent of total development expenditures and afs 16.8 per capita.

We conclude this section by noting that at least nominally the cost of the health services provided by the Public sector is relatively small. But we can also note that the number of people reached is very small.

3. Priority Assigned to Public Health Services

The GOA has recently demonstrated its determination to obtain the financial resources needed to support an accelerated development effort. And at the macro level, and for the next several years, anyway, it appears that GOA financial resources will not be a major bottleneck to

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1/ Some companies provide medical facilities to employees.

development activity. Whether adequate resources will be made available to particular sectors is another question. The answer depends in good part upon the priority placed upon developing the sector. Following is an attempt to assess the priority placed upon the provision of expanded public health services by a comparison of budgets.

The priority status should be reflected, it would seem, in the growth of ordinary as well as development expenditures. Below, growth in ordinary expenditures of the MCPH is compared with growth in such expenditures of all ministries. Budgetary development expenditures of the MCPH are also compared with total such expenditures.

Index Numbers of Expenditures
(1970/71 = 100)

Budgetary Expenditures	Actual					Budget
	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76
A. Ordinary						
- by MCPH	100	119	134	138	147	175
-by all ministries	100	102	107	118	123	142
B. Development						
-by MCPH	100	84	139	147	147	174
-by all ministries	100	111	138	115	137	239
C. A+B						
- by MOPH	100	109	135	141	147	174
-by all ministries	100	105	117	117	128	173

The comparative performance of the index numbers in the above table suggests that the GOA placed a relatively high priority on the provision of public health services until 1975/76. In that year, the development budget of all ministries was increased relatively much more than that of the MOPH. In the above table actual expenditures are used except for 1975/76 when budgeted figures are used. The following table shows why the MOPH's approved development budget was not increased in 1975/76. While the MCPH typically spends almost all its ordinary budget, it has been having a difficult time utilizing its development budget. Thus:

MOPH Budgetary Development Expenditures
(afs millions)

Development Expenditures	1972/73	1973/74	1974/75	1975/76
A. Actual	79	84	84	NEA *
Approved	96	112	147	99
% that A is of B	82	75	57	-

* no estimate available

In 1973/74, in spite of fact that MOPH was able to utilize only 82 percent of budgetary development funds available to it in prior years, a 17 percent increase in its development budget was still approved over the amount approved in 1972/73. And in 1974/75, even though the MOPH had been able to utilize only 75 percent of budgetary development funds available to it in prior years, a 31 percent increase in its development budget was approved over the amount approved in 1973/74. In 1974/75, the MOPH was able to utilize only 57 percent of its approved development budget. It did not make sense to approve another large increase (as was done in 1974/75) in 1975/76. The approved budget of afs 99 million still permitted an 18 percent increase in development expenditures from the actual of afs 84 million of 1974/75. From the foregoing it seems clear that the GOA does place a high priority on the provision of expanded public health services. The performance demonstrates also the difficulty the GOA experiences in moving from general, high-level policy to the effective implementation of that policy through projects.

4. Project Costs

Phase I of this project calls for constructing, equipping, staffing and bringing into operation 4 Rank I, 42 Rank II (3 of which are partially constructed) and 4 Rank III BHC complexes. To the extent that suitable rental buildings are available, perhaps as many as 20 such buildings will be used to temporarily house BHCs, until new structures can be completed. The abbreviated implementation schedule is:

A. Rentals

Number Units	Rental Period	Months Rented/ Unit
5	Jan 77-Apr 78	16
10	Jul 77-Oct 78	16
5	Oct 77-Oct 78	13

B. Construction

Number Units	Construction Period *
3	Nov 76-May 77
9	Nov 76-Apr 78
25	Apr 77-Oct 78
13	Aug 77-Oct 78

* BHCs are operational by end of period

C. Project BHCs Operational

Rented	Gov't Owned	TOTAL	By Six Month Intervals
0	0	0	Dec 21, 1976
5	3	8	June 30, 1977
20	3	23	Dec 31, 1977
15	12	27	Jun 30, 1978
0	50	50	Dec 31, 1978

The total project is estimated at $6.1 million. This figure includes a 15 percent contingency for construction costs and assumes a price increase of four percent annually for the second and third years. The US share of the cost is 64 percent; the GOA share, 30 percent; and other donors (UNICEF), six percent. Of the total AID plus GOA cost, the latter's contribution is 32 percent and the former's 68.

A summary table showing the sources and uses of project funds is presented below. Since the Alternative Health Delivery System (AHDS) models are yet to be designed and the Afghan contribution to these models is speculative, no estimate of the GOA contribution to AHDS is included in the table. The current free market exchange rate is afs 55/dollar and this rate is used to convert Afghanis to dollars and vice versa unless stated otherwise.

Sources and Uses of Project Funds
($1000)

Use	Source			TOTAL
	AID	GOA	Other	
Personnel	1383 [a/]	800	62	2,245
Commodities	156	184	163	503
Participants	425	-	-	425
Land	-	50	-	50
Rent	15	5	-	20
Construction	1552 [b/]	616	88	2,256
Alt. Health Delivery (AHDS)	61	-	-	61
Sub-Total	3592	1654	313	5,559
Inflation Allowance [c/]	111	90	9	210
Contingency [d/]	233	92	13	338
TOTAL	3936	1836	335	6,107

a/ Includes per diem
b/ FAR
c/ Four percent annually for second and third years. For AID, applies only to FAR since price of all other inputs includes inflation adjustment.
d/ Fifteen percent of construction costs, 1976 prices.

AID Contribution

This has been discussed in detail in Parts 1 and 2.

Other Donor Contributions

UNICEF is the only other donor contributing directly to the project. UNICEF will help provide potable water (estimated at $2200 per BHC) by financing 80 percent of these construction costs. It will also provide one vehicle (Russian jeep, $2000 each), the equipment ($1000), but not the furniture, for each BHC, and help finance drugs (estimated at $150 per BHC). In addition, UNICEF furnishes technical assistance in the maintenance of the vehicles. The WHO will provide indirect assistance by furnishing technical assistance in drug procurement and WFP/FAC provides food for distribution by BHCs as part of a MCH program. The latter, however is not a component of this Phase I BHS project.

The following table shows an estimate of other donor assistance.

Other Donor (UNICEF) Contributions to Project

(Dollars)

	Year 1	Year 2	Year 3	TOTAL
Personnel [a/]	7400	21,300	33,300	62,000
Commodities				
- Vehicles [b/]	100,000	-	-	100,000
- Equipment [c/]	25,000	25,000	-	50,000
- Drugs [d/]	1,200	4,050	7,500	12,750
Construction [e/]	26,000	44,000	18,000	88,000
Sub-Total	159,600	94,350	58,800	312,750
Inflation Adjustment [f/]	-	3,775	4,800	8575
Contingency [g/]	3,900	6,600	2,700	13,200
TOTAL	163,500	104,725	66,300	334,525

a/ Personnel helping with vehicle maintenance; allocated on proportion that project BHCs will be to total BHCs in country.

b/ 50 vehicles (Russian jeeps) at $2000 each.

c/ Equipment for BHCs; cost $1000 per BHC.

d/ Drugs -- $150 per operational BHC

e/ Potable water; cost, $2200 per BHC; 80 percent covered by UNICEF.

f/ Four percent per year for second and third years.

g/ Fifteen percent of construction costs.

GOA Contribution

Including a 15 percent contingency for construction costs and price increases of four percent annually, the GOA's share of the project costs totals $1.84 million (afs 101.0 million). The projected distribution of annual costs is, in thousands, $321, $524 and $991 (and in millions of afghanis, 17.6, 28.8 and 54.5).

Based upon GOA accounting practices, we estimate the division between budgetary development and ordinary expenditures for the GOA's contribution to the project as:

A. In $1000s	Year 1	Year 2	Year 3	TOTAL
Development	151	200	525	876
Ordinary	170	324	466	960
Total	321	524	991	1836
B. In afs millions				
Development	8.2	11.0	28.9	48.2
Ordinary	9.4	17.8	25.6	52.8
Total	17.6	28.8	54.5	101.0

Clearly the ability of the GOA to provide funds for the development budget will be no problem. For as shown earlier, the GOA has been willing to provide substantially more funds than the MOPH has been able to utilize. The ordinary expenditures amount to only six percent of the projected total ordinary budgets of the MOPH for the next three years. 1/ This, too, is clearly manageable.

The GOA contribution to the project is shown in the following table.

1/ Afs 266 million for 1355 (1976/77) afs 278 million in following year and afs 290 million in 1357.

GOA Contribution to Project

	7/1/76-6/30/77	7/1/77-6/30/78	7/1/78-6/30/79	TOTAL
I. BHC Construction				
A. Direct Costs[a]	$95,750	$107,875	$412,000	$615,625
1. New complexes	-	96,875	407,500	504,375
2. Completion	89,250	-	-	89,250
3. Water	6,500	11,000	4,500	22,000
B. Indirect				
1. Tech Support[b]	117,260	117,260	58,630	293,150
II. Land[c]	25,000	25,000	-	50,000
III. BHC Rentals[d]	470	3,360	1,170	5,000
IV. Furniture[e]	15,000	45,000	15,000	75,000
V. Other				
A. Personnel Costs	47,200	158,300	301,000	506,500
1. Direct[f]	31,200	105,300	195,000	331,500
2. Indirect[g]	16,000	53,000	106,000	175,000
B. Other[h]	5,700	31,800	71,500	109,000
VI. Total (1976 prices)	$ 306,380	$ 488,595	$ 859,300	$ 1654,275
VII. Inflation Factor[i]	-	19,500	70,100	89,600
VIII. Contingencies[j]	14,400	16,200	61,800	92,400
IX. Grand Total (afs millions)	$ 320,780 (afs 17.6)	$ 524,295 (afs 28.8)	$ 991,200 (afs 54.5)	$1,836,275 (afs 101.1)

Notes to Table 7

a/ Direct construction costs (1976 prices) are estimated as:

Construction	Unit Number	Unit Cost	Total Cost	GOA Share
New Rank I	4	$ 60,000	$ 240,000	$ 60,000
New Rank II	39	42,500	1,657,500	414,375
New Rank III	4	30,000	120,000	30,000
Sub-Total	47	42,925	2,017, 500	504 ,375
Other Rank II *	3	42,500	127,500	89,250
Sub-Total	50	$ 42,900	$2,145,000	$593,625
Water	50	2,200	100,000	22,000
Total Constr.	50	$ 45,100	$2,255,000	$615,625
Land	50	1,000	50,000	50,000
TOTAL	50	$ 46,100	$2,305,000	$665,625

* Three BHCs now partially completed.

For the new BHC complexes, direct construction costs, in 1976 prices, are estimated at $2,017,500. GOA share is 25 percent or $504,375. It is estimated that the three Rank II BHCs now under construction will be 60 percent completed by time project starts. Total costs of the three will be $127,500 with US contribution being $38,250 (i.e. .75 x .40 x $127,500) and GOA share $89,250. For year 2, one Rank I, 7 Rank II and one Rank III are to be completed.

The estimated 1976 construction cost of a Rank II BHC complex is:

Main building	$ 27,500
Bachelor Quarters	7,000
Family Quarters	8,000
Sub-Total	$ 42,500
Potable Water	2,200
TOTAL	$ 44,700

Eighty percent of the cost of potable water will be grant financed for UNICEF and 20 percent of cost will be borne by GOA. The GOA will have to contribute the land on which complexes are to be built. This cost

is estimated at $1000 per BHC. In addition to bachelor and family quarters, hostels will have to be constructed at Rank I centers. The cost of constructing a hostel is estimated to be something less than that of bachelor quarters. It is assumed that land and potable water for the 50 centers will average their respective Rank II costs of $1000 and $2200.

b/ Thirteen percent of total direct construction costs (based on past relationship). Direct construction costs total $2,255,000. Technical support cost is distributed evenly over the project life.

c/ Land is valued at $1000 per BHC site. The total cost is $50,000.

d/ Rent of $65.50 per month per site. GOA share is 25 percent.

e/ Afs 82,500 (=$1500) per BHC complex.

f/ Staffing requirement and 1976 GOA personnel costs for a Rank II BHC are:

Staff	Number	Afs/Year
MD	1	26,000
Nurse	1	21,400
ANM	1	19,200
Sanitarian	1	19,200
Lab. Technician	1	20,400
Clerk/Storekeeper	1	16,000
Driver	1	14,000
Vaccinator	1	18,000
Custodian/Guard	2	21,600
Sub-Total		175,800
Plus Fringe Benefits		39,555
TOTAL		215,355

(TOTAL in 1976 dollars = $3,900)

Personnel costs will be higher for Rank I centers and lower for Rank III but with overall average very close to that of the Rank II BHC and the latter can be used for the total system. Personnel costs for the low-cost outreach experiment are not included here. Assumes that 8 BHCs would be staffed

Notes to Table 7 (contd)

in the first year of project; 19 more during second year; and an additional 23 in the following six months. In each case, personnel costs are charged against the full year. It should be noted that in GOA accounting, fringe benefits are not included in or charged against the budgets of individual ministries.

g/ These indirect personnel costs, based upon recent-past relationships include expenditures (e.g. for supplies, transportation) in support of personnel. The indirect personnel costs that can be allocated to BHCs are:

- MOPH technical support (14% of BHS ordinary budget);
-MOPH central administration (6% of BHS ordinary budget);
-Other - malaria, smallpox, rozantoon field programs - (16% of BHS ordinary budget).

These items total to 36 percent of BHS ordinary budget. It is to be noted that there is technical support in both ordinary and development budgets. The ordinary budgets of the BHS have been 15-16 percent of the ordinary budgets of the MOPH for the last three years. For 1355, the ordinary budget of the MOPH is tentatively set at Afs 266 million, up to 9.5 percent from the Afs 243 million of 1354. After 1355, the ordinary budget of the MOPH is now projected (which projection cannot be taken very seriously) by the Seven-Year Plan to grow at 4.5 percent annually through the remainder of the Seven-Year Plan period. If one assumes that the ordinary budget of the BHS will be 15-16 percent of MOPH ordinary budget and that the indirect personnel costs will be 36 percent of BHS ordinary budgets, the indirect personnel costs will be 15, 15 and 16 million Afghanis respectively for years 1355, 1356 and 1357. There will be approximately 100 BHCs in the country by the time the project starts. Allocating the indirect personnel costs on the basis of the proportions of project BHCs to total BHCs gives 1.1, 3.2 and 5.3 million Afghanis respectively, 1355-57, a total of Afs 9.6 million, or roughly $175,000. The 18 new positions to be established in MOPH (Kabul) are assumed to be covered by this figure.

Notes to Table 7 (contd)

h/ Includes:

	Afs/Year	Afs 1000's Year 1	Year 2	Year 3
A. Operation of Health Center				
1. Building Maintenance	(6000)	24	134	300
2. Petrol, kerosene, motor oil	(8500)	34	189	425
3. Wood for heating	(1900)	8	42	95
4. Local Travel, staff	(2000)	8	45	100
5. Local Vehicle repairs	(4000)	16	89	200
6. Misc supplies	(2900)	12	65	145
7. Forms	(2400)	10	53	120
8. Vehicle maintenance, major	(5700)	23	127	285
9. Lab supplies	(8600)	34	191	430
10. Vaccines (BCG & Smallpox)	(12000)	48	267	600
11. Drugs	(16000)	64	356	800
Sub-Total	(70,000)	281	1558	3500
B. Bachelor and Family Quarters				
1. Maintenance	(2000)	8	45	100
2. Fuel	(5000)	20	111	250
3. Miscellaneous	(1600)	6	36	80
Sub-Total	(8600)	34	192	430
C. TOTAL, Complex (Afs 1000s)	(78.6)	315	1750	3930
1976 Dollars (rounded)	($1430)	5,700	31,800	71,500

For the first year, one half of annual costs is used. For the second year, it is assumed that the costs for newly established complexes are incurred for three-fourths of the year and for the third year, costs are taken for the whole year. If the GMD's inventory of drugs is a fairly constant proportion of the amount it supplies, then its inventory should increase. No allowance was made for this.

i/ Prices for first year already adjusted for possible price increases. For remaining period, prices assumed to rise by 4 percent annually.

j/ Contingency applied only to direct construction costs (1976 prices), a 15 percent figure used. It is believed that cost used will be lowered by an anticipated change in design. If not for this, a higher contingency figure would be used.

On the basis of foregoing cost estimates, and allocating indirect costs (e.g., some personnel, all participants) over 85 BHCs (i.e., 8 operational first year; 27 second; and 50 third), the average cost of making a BHC operational will be approximately $92,400 in 1976.[1/] Thus:

	Average Cost per BHC
A. Direct Costs	$ 58,080
- Construction	45,100
- Furniture, Equipment, Vehicle, Land	5,900 [a/]
- BHC Staff	3,900
- Supplies, drugs, repairs	3,180 [b/]
B. Indirect Costs	$ 27,509
- Personnel	
- MCPH	5,510
- AID	16,270
- UNICEF	729
- Participants	5,000
C. A+B	85,589
D. Contingency	6,765
E. Grand Total	$ 92,354

On the assumption of a four percent annual price rise, the cost would be about $95,000 in 1977 and $98,000 in 1978.

Based on the work done by MCPH and data collected by the MSH team, it is expected that, on the average, a project BHC will be reasonably accessible to 16,600 persons. If this is the case, under

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1/ On our estimates, this slightly overstates the 1976 costs since some items are valued at their average cost over the project life and the average is adjusted for inflation.

a/ Includes $400 audio visual training/office equipment.

b/ $1600 for contraceptives.

this project the cost of initially providing some minimal level of health services to the public will amount to about $5.75 per capita for the population to which the services are accessible. One could not, it would seem, do much better. The services provided still have to be proven, of course, and an important issue that will have to be addressed is the extent of which the BHS system is to provide free drugs and contraceptives to its clientele.

All participant and technical US assistance has been charged to the project. To the extent that this assistance is effective, the benefits will not accrue exclusively to this project but will be beneficial in expanding the BHS system as the GOA now intends to do. Furthermore, the BHCs will serve as the centers from which low-cost health delivery systems will operate to provide health services to the sparsely settled rural population.

AHDS

As noted, the system of BHCs to be located in the more densely populated centers will be accessible to perhaps 50 percent of the population. The cost of providing health services to this part of the population through a system of BHCs appears feasible on a cost per client basis and the system's demands upon the country's resources appear not unreasonable and capable of being sustained by GOA budgets. The extension, however, of health services into the more sparsely populated areas by an expansion of BHCs so that these units would be accessible to, say, 80 percent of the population becomes increasingly costly. While such a system perhaps could be sustained, it would be a high cost one in a very low income country.

Phase I will address this problem; it will address the question of the kind of system that can be developed to provide some minimum level of health services at a tolerable cost to that part of the populace to which BHCs are inaccessible. The problem will be attacked by launching two experimental AHDS models. The information and experience generated by the models will be the basis for designing replicable, low-cost health delivery systems for nation-wide implementation. These AHDS models will radiate outward from the BHC infrastructure to service the peripheral population. The models have yet to be formally designed. Cost estimates are accordingly speculative. Because of the latter, these project costs are not included in GOA contributions. It is expected, however, that each model will require six full-time MOPH personnel and perhaps 20 local, part-time volunteers who would participate in planning, designing and operating the models. It is

anticipated that the AHDS communities will provide shelter. Commodities will be required -- drugs, medicines, contraceptives and perhaps MCH rations. One model may heavily subsidize the consumption of commodities; the subsidy may be much less for the other model. One cannot have a low-cost (financial, to GOA) program, however, if MCH food rations are provided. It is therefore likely that the nutrition component will be dealt with, not by providing foods, but rather by local volunteers utilizing a nutrition education and demonstration approach with local foods. The number of people that the models will reach is again speculative. However, the beneficiaries may be in the neighborhood of 3000 per AHDS model. For while the priority target group will be the married female, it is through her that family health services will be provided. It is likely also that the models will contain an environmental sanitation component impacting to some extent on everyone in the AHDS communities.

Speculating on the value of the Afghan contribution might give something like what is shown in the following table. It is assumed that first AHDS experiment will be implemented at beginning of second year and the second, midway in the second year.

Table 8

Speculations on Cost of AHDS Models
(dollars)

	Year 1	Year 2	Year 3	TOTAL
A. MOPH Personnel [a/]				
1st project	-	3140	3140	6280
2nd project	-	1570	3140	4710
B. MOPH Transportation [b/]				
1st	-	1800	1800	3600
2nd	-	900	1800	2700
C. MOPH Commodities [c/]				
1st	-	9000	9000	18000
2nd	-	4500	9000	13500
D. Local Personnel [d/]				
1st	-	3270	3270	6540
2nd	-	1635	3270	4905
E. Local Buildings [e/]				
1st	-	65	65	130
2nd	-	35	65	100
Total	-	25,915	34,550	60,465

a/ Six personnel per project per year; average monthly pay, including fringe benefits, Afs 2400 per month.
b/ One vehicle per project, 15,000 miles per year at 12 cents per mile.
c/ Assumes commodities of $3 per projected client and 3000 clients per project per year. Includes no food rations.
d/ Assumes 20 half-time volunteers per year per project; time valued at Afs 1500 per month (full time) per person.
e/ Assumes a rental value of local building contribution of Afs 300 monthly.

On assumption of 3000 clients per project, the unit cost per client would be about $5.75 ($34,550 divided by 6000) or Afs 315 annually.

Foreign Exchange Cost of the BHS Project

The information needed to determine with some degree of precision the foreign exchange cost of the project is not available. To illustrate: Wood will be used to a large extent as the fuel to heat buildings. Some areas will be relatively close to supply sources, requiring nothing more than donkey transportation. For other areas, wood will be hauled in by truck over fairly long distances. The trucks use imported fuel, oil, tires and parts. They travel on improved highways whose maintenance requires imported asphalt (hauled by imported trucks using imported fuel, etc.) spread by imported machines using imported fuel and parts and manned by workers who consume some imported food and domestic food produced with imported fertilizer contained in imported bags.

In the following table, an attempt is made to present a ballpark estimate of the foreign exchange costs of the BHS project. No attempt is made to estimate the gross inflow of foreign exchange due to personal expenditures by expatriates or gross outflows because of the imports the expatriates purchase. On the estimate obtained, the foreign exchange costs amount to slightly less than 50 percent of project costs. The foreign exchange contribution totals to $4.27 million; the foreign exchange cost, to $2.92 million.

Item	Total Cost ($1000's)	Foreign Exchange Cost	
		%	Amount ($1000's)
Construction	$ 2594 [a]	20	$ 519
Vehicles	100	95	95
Furniture	75	20	15
Rent	20	0	0
BHC Equip (UNICEF)	50	95	48
Land	50	0	0
Supplies, drugs, rprs [b]	122	75	92
Personnel, MCPH	800	0	0
Personnel, AID	1383	100	1383
Personnel, UNICEF	62	100	62
Outreach projects	61	75	46
Participants	425	95	404
Commodities (US)	156	100	156
	5897	47.8	2820
Allowance for Inflation	210	47.8	100
	$6107	47.8	$2920

a/ Includes 15 percent contingency
b/ GCA and UNICEF

5. Ability of the GOA to Finance Recurring Costs

After the 50 BHCs are constructed and operational, will the GOA be able to meet the operating costs of the system ? The table below presents an estimate of the average operating costs of a BHC (with 16,000 clients) in 1976 prices. These costs can be adjusted for assumed price increases in the future.

Costs of Operating a BHC, 1976 Prices

	Amount	% of Total
1. Depreciation	$ 2415	19
- plant [a]	1925	15
- equipment [b]	490	4
2. Personnel	$ 5970	48
- BHC	3900	31
- MOPH support [c]	2070	17
3. Other	$ 4135	33
- supplies, drugs, repairs	3180	25
- contingency - 30%	955	8
4. TOTAL	$12520	100
	(afs 388,300)	

a/ Average direct construction cost, 1976 prices, of $45,100 plus 15 percent contingency plus average MOPH tech support for construction of $5863 equals $57,728; straight line depreciation; 30 year life.

b/ Furniture, $1500; BHC equipment, $1000; vehicle, $2000; Training/Office Equipment (USAID), $400. All with ten year life.

c/ Average during project period - 53 percent of BHC personnel costs.

In addressing the question of the ability of the GOA to meet BHS operating costs, it is assumed that if advisory assistance is desired, such assistance will be available from some donor on a grant basis. It is assumed, however, that no assistance will be provided in financing supplies, including drugs and contraceptives. No provision will in fact be made in the GOA budget to cover depreciation until replacements are actually made. Personnel costs will have to be provided for in budgets, however, as will "other" costs.

A fair estimate of the relative magnitude of the operating costs (those that have to be covered by budgets) of 50 BHCs can be obtained by projecting 1976 costs forward for say five years after the completion of the project. If we assume that personnel and "other" costs will increase by three percent annually after 1978 (and four percent in 1977 and 78), we obtain the following values, in millions, for 1979-1983: afs 31, 32, 33, 34 and 35. Not all of this will be charged to the MCPH budget.. The figures include fringe benefits which would be charged to the "Subsidies and Grants" account. The total that the 50 BHCs will add to this account will amount to a very small fraction of one percent. The remainder, charged to the MCPH, will amount to about seven percent of the projected ordinary budget of the MCPH. Thus it seems clear that the GOA will have no trouble financing the operation of the 50 BHCs.

On the assumption that each BHC will service an average of 16,000 clients annually (for a 800,000 total), the (undiscounted) recurring cost, including depreciation, per client would be about $0.80 in 1976 prices. Considering the fact that the drug and vaccine component is so small (4.1 cents per patient), this seems rather high. The major cost is for personnel which accounts for 48 percent of total recurring costs. Experience in Parwan Province indicates that we can reasonably expect a BHC to serve 25,000 - 26,000 clients annually. If such an average were attained, the cost per patient in the project areas would be very reasonable. 1/

1/ The main variable costs would be drugs, vaccines, lab supplies, forms, miscellaneous supplies and contraceptives. Assuming a proportionate growth (moving from about $124,000 to $202,000) in these costs, utilization of BHCs at 26,000 clients a year would reduce the per patient cost to 55 cents each (in 1976 prices).

C. ECONOMIC ANALYSIS

The complexity of the interrelationship between health, population growth and general socio-economic development has been addressed by a number of studies. [1/] It has been noted, for example, that casual relationships are not straight forward but rather are buried in a complex matrix of multiple causes and feedback interactions. Findings and interpretations which are valid under certain conditions and at specific times may be totally reversed in somewhat changed situations and at other times. Apparently, extant claims of project impact should be viewed with some skepticism.

1. Beneficiaries

While the BHCs will be placed in the more densely populated centers of the project areas, the target population is rural. All evidence indicates that the vast majority of the rural population is very poor. An example of such evidence, is the following. Of a sample of 718 farmers living in Kandahar, Ghazni, Parwan, Baghlan, Kunduz, Paghman and Nangahar provinces, 11 percent were landlords, 31 percent owner-operators and 28 percent sharecroppers-renters. Total net farm plus nonfarm income amounted to afs 18 million; there were 6863 family members for an average of afs 2620, or about $35 per person.[2/] The average for the landlord class was afs 4730; for the owner-operator, afs 2500; and for the sharecropper-renter, afs 1750. The latter two groups amounted to 88 percent of the farmers (and 87 percent of family members) and average per capita income for the two groups was afs 2300 or $30. The authors note that the average shown in their report "present a somewhat overly optimistic picture of the economic situation for the majority of the populace many of whom must be subsisting at close to starvation levels." [3/]

1/ See, e.g., Taylor and Hall, "Health, Population, and Economic Development," Science, Vol. 157, 1967 and Hughes and Hunter, "Diseases and "Development" in Africa." Soc. Sci. and Med., 1970, Vol 3.

2/ Converted at the exchange rate of afs 75-80 per dollar prevailing at the time.

3/ Whiting and Hughes, The Afghan Farmer: Report on a Survey, R. R. Nathan Associates, Inc. October 1971, p. 17.

It is estimated that the project will make health services accessible to a population of 830,000 people. The project will furthermore put in place infrastructure from which low-cost outreach systems will be developed to service the more sparsely settled rural population. The generalized longer run goal of the project is to improve the quality of life of the population served by the project. It is especially concerned with improving the lot of the Afghan female.

2. Anticipated Impact

As noted, we cannot be certain of the impact of the project, either in quantitative or qualitative terms. The following, however, is what is anticipated. The family planning component will work to decrease birth rates. This may be more than off-set by the increase in fertility and child bearing capacity resulting from better health and improved nutrition stemming from the project. In any case, it seems likely that the project will reduce death rates by enough, given the cultural milieu of the project, so that the short-run population growth rate will increase over its present level. The reduction in mortality rates is apt to be especially large for infants, for the mortality rate for the latter is currently perhaps as high as 220 per 1000 live births, there thus being latitude for a dramatic drop. One can anticipate a longer life expectancy, a more vigorous, alert, innovative society with improved productivity, fewer people disabled and/or deformed by disease or crude traditional medical practices, and fewer days of work lost because of illness and morbidity. The yield on human capital, including investment in education, should increase. The dependency ratio should rise with the economically productive population becoming relatively smaller. More schools and other social facilities will be required per working population as well as per total population. There may be increased pressure on the country's food supply.

There will be some regional redistribution of real (the provision of social services) income in favor of the areas in which the project will deliver its health services. It is safe to assume that the redistribution will be mainly from urban to the rural areas. For the nation as a whole, the project will distribute social services more broadly than they are now being distributed, but may make it more difficult for per capita real income to rise in the short to intermediate term. This is of course not certain. There will be forces working to increase and to decrease. In the longer run, we can be fairly confident that the project will result in smaller families, increased productivity and an increase in the general well-being of the population. The project will have a liberating impact upon the Afghan female. It will make it possible for

her to increase her participation in, as both a recipient of and contributor to, those socio-economic activities required to achieve a higher standard of living and quality of life.

The anticipated shorter run adverse effects of the project are due to an expected increase in population growth. It is because of this that USAID is stressing family planning. Initial acceptance of family planning services (and commodities) seems to be quite good in the AFGA project. While there is not enough evidence yet to declare that there is an inverse relationship between acceptance rates and birth rates, it does seem reasonable to believe that such a relationship obtains. To the extent that it does, the family planning activities supported by USAID will counter the impact of lower mortality rates upon population growth. It is conceivable that even in the short run, family planning will reduce fertility rates by more than health services will reduce mortality rates.

3. Economic Costs

This section attempts to obtain a rough estimate of the economic cost arising from the project. In one case, empirical 1976 prices[1/] are used; in another case, foreign exchange is shadow priced. The summary table is shown below. All foreign assistance is included.

	Economic Costs ($ millions)
A. Empirical Values	
- undiscounted	20.75
- discounted at	
- 10%	8.49
-15%	6.62
B. FX Shadow Priced	
-undiscounted	23.86
-discounted at	
- 10%	9.90
- 15%	7.72

1/ Some USAID costs have embodied in them anticipated price changes. The analysis does not include the (unknown) GOA cost of AHDS, nor the AHDS beneficiaries.

Over this 30 year period, it is estimated that BHC system would serve roughly 34 million clients.[1/] On these estimates, the economic cost would average between 20 US cents and 29 cents per client. If these estimates are approximately correct, the health services will be delivered at a relatively low cost.

In calculating the economic costs, it was decided that the cost of training medical and paramedical personnel could not be legitimately charged against the project because the country's output of such personnel would be practically the same with the project as without.[2/] The output is an overall manpower policy decision[3/] having little or nothing to do with the project. With the project, some personnel will be assigned to it which in the project's absence would still be employed by the GOA. It was assumed that relative prices will be constant and that if the foreign assistance did not go to this project, it would be available to another project. The social cost of capital was assumed to be in the neighborhood of 10-15 percent. It is probably closer to the latter than the former. It was also assumed that wages did not need to be shadow priced. Skilled labor presumably should be priced higher than is actually being paid and unskilled, lower. On the average, the aggregate wage bill may be as good a figure as could be used given the information needed to compute accounting prices for especially skilled labor. The exchange

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1/ Average number of clients per BHC is assumed to be 16,000 annually by end of Phase I. It is assumed that clients will grow by ten percent annually until clients average 26,000 per BHC and then stay constant at this level. The useful life of building is assumed to be 30 years. While most of the costs, including those for personnel, associated with the BHC system are fixed, the quantity of drugs, contraceptives, vaccines, forms and lab and miscellaneous supplies is assumed to be proportional to client numbers.

2/ ANM output is an exception.

3/ The economic cost of this policy, which preliminary work shows to be quite high, is of course a different question.

rate was adjusted,[1/] however, because duties on imported commodities are much more pervasive and higher than are taxes on internally produced goods.

No comparative cost-effectiveness analysis will be presented. While a number of alternative approaches to the delivery of health services have been proposed or suggested over the past six months, none were satisfactory. Some were obviously too costly. For others, USAID could not accept the orientation and underlying philosophy. Furthermore, the alternatives suggested were more at the idea stage, not articulated well enough to make a formal cost comparison with this project.

The tables following show the cost breakdown by source, purpose and year.

1/ By using a formula suggested by Schydlowsky in " On the Choice of a Shadow Price for Foreign Exchange," Harvard University Development Advisory Service, Economic Development Report No. 108:E* = (Td/M+Y +Tm/M +1) E, where E* is shadow price of foreign exchange; E is market exchange rate; Td is domestic indirect taxes; M is commodity imports; Y is money GDP; and Tm is import duties. Using averages for the last three years, one obtains: E* = (65/105,500 + 3488/13,500 + 1) 58 = 73. Imports include loan and grant financed imports and it is not clear that all such imports should be included. Wheat and sugar, e.g., should be, but doubtful that all project commodities should. Using just commercial imports, E* turns out to be 80. This is high, however, since some non-commercial imports enter the domestic market for consumption. In calculations, a rate of 75 was used.

Foreign exchange contributions to the project are greater than estimated foreign exchange costs. If foreign exchange is shadow priced, it would seem that the difference (contributions estimated at $4.27 and foreign exchange financial costs of $2.92) should be valued at the shadow price and entered as a credit (or negative cost) to the project. This was not done but would affect the outcome of the economic costs to the country by an insignificant amount.

Table 9

Project Costs (Financial)

	Year 1	Year 2	Year 3	TOTAL
1. Construction	$ 302,260	$ 584,760	$ 1,711,130	$ 2,598,150
- Buildings	127,500	387,500	1,630,000	2,145,000
- GOA	(89,250)	(96,875)	(407,500)	(593,625)
- USAID	(38,250)	(290,625)	(1,222,500)	(1,551,375)
- Water	32,500	55,000	22,500	110,000
- GOA	(6,500)	(11,000)	(4,500)	(22,000)
- UNICEF	(26,000)	(44,000)	(18,000)	(88,000)
- Land (GOA)	25,000	25,000	-	50,000
- Tech Support (GOA)	117,260	117,260	58,630	293,150
2. Equipment	140,000	90,000	15,000	245,000
- GOA	15,000	45,000	15,000	75,000
- USAID	-	20,000	-	20,000
- UNICEF	125,000	25,000	-	150,000
3. Rent	1,880	13,440	4,680	20,000
- GOA	470	3,360	1,170	5,000
- USAID	1,410	10,080	3,570	15,000
4. Outreach Projects (USAID)	-	40,000	21,000	61,000
5. Supplies, Repairs	19,700	79,050	159,000	257,750
- GOA	5,700	31,800	71,500	109,000
- USAID	12,800	43,200	80,000	136,000
- UNICEF	1,200	4,050	7,500	12,750
6. Personnel	607,800	732,800	610,900	1,951,500
- GOA	47,200	158,300	301,000	506,500
- USAID	553,200	553,200	276,600	1,383,000
- UNICEF	7,400	21,300	33,300	62,000
7. Participants (USAID)	220,000	170,000	35,000	425,000
8. Sub-Total	1,291,640	1,710,050	2,556,710	5,558,400
9. Contingency	24,040	66,395	247,875	338,310
- GOA	14,400	16,200	61,800	92,400
- USAID	5,740	43,595	183,375	232,710
- UNICEF	3,900	6,600	2,700	13,200
10. Inflation Allowance	-	35,275	173,900	209,175
- GOA	-	19,500	70,100	89,600
- USAID	-	12,000	99,000	111,000
- UNICEF	-	3,775	4,800	8,575
11. Grand Total	$1,315,680	$1,811,720	$2,978,485	$ 6,105,885

Table 10

Economic Costs (Undiscounted) of Building & Operating Project Health Delivery System
($1000)

Year	Construction a/	Contingency	Equipment b/	Rent Outreach	Supplies Maint c/	Personnel d/	Participants	TOTAL
1	302	24	140	2	20	608	220	1316
2	585	66	90	53	79	733	170	1776
3	1711	248	15	26	159	611	35	2805
4	-	-	-	-	171	301	-	472
5					184			485
6					193			499
7					214			515
8					231			532
9					238			539
10			140					679
11			90					629
12			15					554
13			-					539
.								
.								
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20			140					679
21			90					629
22			15					554
23			-					539
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30	-	-	-		238	301	-	539
Totals	2598	338	735	81	6492	10,079	425	20,748

a/ Includes direct construction costs, land and MOPH technical support for construction.

b/ Vehicles, furniture, BHC equipment, including USAID training/office equipment.

c/ Supplies, repairs for BHC complexes including UNICEF drugs and USAID contraceptives.

d/ All personnel -- MOPH, AID, UNICEF -- except those providing technical support for construction.

Table 11

Economic Costs (Undiscounted) of Building and Operating Project Health Delivery System with Foreign Exchange Shadow Priced at Afs 75 per Dollar
($1000)

Year	Construction a/	Contingency	Equipment b/	Rent, Outreach	Supplies Maint c/	Personnel d/	Participants	TOTAL
1	315	26	184	2	27	811	300	1665
2	617	71	109	64	104	941	232	2138
3	1832	266	16	32	209	733	48	3136
4	-	-	-	-	224	301	-	525
5					241			542
6					260			561
7					280			581
8					303			604
9					312			613
10			184					797
11			109					722
12			16					629
13			-					613
.								
.								
.								
20			184					797
21			109					722
22			16					629
23			-					613
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30	-	-	-	-	312	301	-	613
Total	2764	363	927	98	8512	10,612	580	23,856

a/ Includes direct construction costs, land and MOPH technical support to construction.

b/ Vehicles, furniture, BHC equipment, audio visual training equipment.

c/ Supplies, repairs for BHC complexes including UNICEF drugs and USAID contraceptives.

d/ All personnel -- MOPH, AID and UNICEF -- except those providing technical support for construction.

P 1900022 Feb 75

FM SECSTATE WASHDC

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AIDAC

SUBJECT: Basic Health Services Project Paper:
306-11-590-144

1. Cutcome of Feb 5 review was general consensus subject project has merits but project paper contains critical gaps which require resolution prior further AID/W consideration for approval. If these gaps as discussed below can be easily resolved, USAID should submit response as PP supplement or annex. Understand much info already available in USAID. Although full response to each issue/question raised may not now be available, request USAID response indicate how issues being addressed and when results might be available.

2. Rationale for size of project: given range of logistics, administrative and staffing problems in MPH, critical preventive health problem priorities, and fact that outcome of pilot effort at Parwan/Kapisa will not be known until later, PP does not clearly define Mission rationale for proceeding at this time with comprehensive health system expansion, including new facility construction.

2.A. Issue raised during review as to why smaller project focusing on improving existing institution (62 PHCs and MPH support) and the PHC preventive health service capabilities was not developed as Phase I, with construction new facilities and further improvements/outreach planned for Phase II, if GCA actions warrant? PP take as given personnel will be trained and in place and GCA financial/logistic support will be provided to clinics over longer term. However, it not clear how the many socio-economic problems described in

the PP (such as personnel assignment outside Kabul and financial/logistic support) can be overcome and that we can reasonably take in account all pieces likely to fall together. Questions raised as to what are long term and management repercussions of expanded BHC and outreach program on GCA limited resources? What are MPH plans for providing necessary inputs of staff (including info on how physician assigned and maintained in clinics), drugs, and supervision/training to improve performance of existing BHCs. Is there reasonable expectation that these plans can be accomplished?

3. Existing system and pilot effort: in order consider U.S. inputs under this project, important we have better understanding operations existing system and what is being done in pilot area. References in PP text and annexes inadequately describe present status of health services delivery. We aware that administratively MPH is a complex of many staff offices and vertical programs. How do/will BHCs relate to provincial level health facilities (such as hospitals) and vertical disease control as well as other MPH programs? What are the critical MPH offices and linkages which must be strengthened to ensure project success and what are GCA plans in this respect?

3.A. Understand that since Parwan-Kapisa (P-K) demonstration began, changes have been occurring. It important we understand what existed before demonstration and what changes have subsequently occurred in MPH and BHCs? What changes are expected and necessary during project and by end of project? Would appreciate more detail on situation at beginning, type of GCA and MSH inputs, data being collected and findings to date (types of services being performed by BHC staff, relative effectiveness in each (garble) population covered with what services both in and out of BHC facility). What are reasonable expectations of further efficiency and output/impact on health in P-K BHCs? Is P-K demonstration area reasonably typical and can results be replicated? What MPH inputs are critic. for success?

4. Baseline data and Evaluation Plan: Baseline data on

current actual MPH staffing, funding, supply, utilization in addition output indicators such as patients served through BHCs and what services essential in measuring any subsequent progress in moving toward sector goal and should be included in project evaluation plan. Theme throughout PP is hypothesis that qualitative improve - ments in performance of EHCs in delivering services will improve health status. Believe operational plan for addressing data gaps and identification of critical problems is necessary. Assume some work already initiated in pilot area to collect such data. However, need info on how this will be handled under expanded effort. What is expected in qualitative terms at end of project? Phase I? Request Mission provide details on baseline date currently being and to be collected under expanded effort and outline proposed evaluation plan.

5. Scope and role of U.S. advisory services: PP does not directly address critical role and scope of AID advisors, particularly MSH in (A) improving effectiveness of EHC staff and administrative/logistic support of EHC network; and (E) analyzing present rural services delivery (including preventive health), and designing, implementing and evaluating field studies to improve and increase EHC effective coverage to 30 percent population.

5.A. Request additional information on planned scope and role of both MSH and Santa Cruz technicians and detailed work plan describing how activities of technicians will contribute to project success and alleviate bottlenecks in current implementation.

6. Gibson prepared assist with response and if completed can handcarry to AID/W early March.

R152131Z May 75
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TO AMEMBASSY KABUL 1938
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UNCLAS STATE 113701

AIDAC

E.O. 11652: N/A

TAGS:

SUBJ: BASIC HEALTH SERVICES PP - Project No. 306-11-590-144

REF : STATE 36696

1. Believe draft PP supplement handcarried by Towery requires restructuring in order integrate responses to Ref with suggested PP design modifications prior proceeding with formal project review/approval. Particularly concerned that need for realistic actionable USAID/GOA plans for improving actual delivery of health services in existing, partially constructed and new BHCs be addressed in USAID response. Towery will discuss suggested modifications on return.

2. Considering delays in receipt either PP revision or PP supplement, AID/W now anticipates possible funding early in FY 76 for our planning purposes, please advise best estimate when suggested revisions can be expected.

Kissinger

COPY.

MINISTRY OF PLANNING
DEPARTMENT FOR TECHNICAL AND ECONOMIC COOPERATION
WESTERN EUROPE AND U.S. SECTION

No. 4205
Date: 14/11/54
Feb 3, 73

USAID/KABUL

We present our compliments and with reference to your letter of January 31, 1973 in which some statements were made regarding the project of expanding cooperation of Basic Health services (cooperation in Expanding Basic Health Services Project?), call your attention to the following:

Previously, the Ministry of Health and the AID had discussed the project. Pursuant to that the MCPH proposed some changes and modifications which were submitted to the esteemed office in a letter under 7 Items along with the revised Agreement. In the meeting of Dalw 13, 1354 (Feb. 2, 73) which was held in the Planning Ministry, the project and the aforementioned letter were again discussed with Mr. Gurney (and) Head of the AID Program Office. The parties agreed to the changes, in principle.

On the other hand, the Ministry of Health, in compliance with the instruction of the Government of Afghanistan, prepared the detail of the Expanding Project of Basic Health Services and has sent it to be placed at your disposal for final actions.

We hereby, submit the aforementioned papers to the esteemed Office and expect immediate action, and that this Ministry is informed of such actions as soon as possible.

Yours sincerely,
sd/ Ali Ahmad Khoram

Ali Ahmad Khoram
Minister of Planning

cc: MCPH
Planning Dept of Planning
Ministry
Encl: 44 sheets of documents

COPY

United States Government
MEMORANDUM

TO : All Division Chiefs Date: December 15, 1974

FROM : Vincent W. Brown, Director

SUBJECT: Fixed Cost Reimbursement Procedure

The attached memorandum, dated December 10, 1974, provides guidance in the application of the Fixed Cost Reimbursement Procedure. The guidance should be followed in developing new projects which may be suitably financed through use of this technique. As we gain more experience with the FCR procedure, we will reexamine and perhaps modify the guidance set forth in the paper.

Please ask members of your staff to read the memorandum.

COPY

United States Government
MEMORANDUM

TO : Mr. Frederick Sligh, DD Date: December 10, 1974

FROM : Terrence J. McMahon, CO

SUBJECT: Policy Proposal for the Fixed Cost Reimbursement Procedure

1. The DAC has met twice to discuss the Fixed Cost Reimbursement procedure. We have considered the basic elements of the procedure as described in AIDTO Circular 513 and have reviewed our experience with the Rural Works pilot project. Our concern now is that the procedure be efficiently and prudently applied to future construction projects involving schools, basic health centers, irrigation systems and additional rural works. This paper attempts to summarize the essential points discussed during our meetings.

2. Legitimate Cost Factors

When possible, it is advisable for AID's reimbursement to be determined on the basis of readily identifiable items such as those goods and services which the implementing agency must buy through contracts or other procurement procedures. Ideally, AID will cover additional costs incurred by grantees or borrowers in project implementation. This approach generally will preclude AID financing of regular salaries and overhead costs incurred by these agencies. It is important that the reimbursement amount be determined from cost estimates that are clearly definable as legitimate.

Additional cost financing may not be practical for all projects; when projects are constructed through use of Borrower/Grantee-owned equipment and directly employed engineering staff and labor force, the "additional" material cost may not represent a sufficient increment. The RDD project has also demonstrated the educational value of cost estimating assistance, and we are financing a percentage of virtually all cost components other than administrative overhead.

The clearly identifiable and "additional cost" approaches described above should be followed in applying the fixed cost reimbursement procedure to the majority of projects and should be accepted as the general rule. Exceptions can be considered after cost components are identified during the project planning process.

3. The 25 Percent Requirement

Section 110(a) of the FAA requires that 25% of the costs of AID-financed projects and programs be borne by the recipient government. This provision will not necessarily limit AID financing to 75 percent of reimbursable estimated costs, The "additional cost" approach, which should explicitly identify reimbursable costs, will not include budgeted Borrower/Grantee (B/G) costs which are attributable to the project and which may be estimated to determine compliance with the legislation. AID might then finance a fixed percentage higher than 75% after having concluded that the GOA will still meet the legislative intent through attribution of B/G costs to the project. We should take a conservative position in establishing percentage reimbursements above 75% to be certain that compliance with Section 110(a) is clearly determined.

4. Cost Estimating

AID's reimbursement amount is ideally fixed before project inception on the basis of detailed and justifiable cost estimates. Deficiencies in the estimating process may result in payments which are substantially less or more than actual project costs. Extreme variations between payments and actual costs will produce critical implementation problems and discredit the fixed cost reimbursement procedure. Provisions are going to have to be made to document the basis for the cost estimates and to justify the estimates as not above market value.

Cost estimating should improve with experience. Consequently, we should attempt to divide projects into logical segments which can be financed sequentially. Cost estimating deficiencies identified during the course of implementing any segment may then be remedied before estimating and "fixing" the amount to be reimbursed for the next segment. This technique may be accomplished through ProAg amendments to incrementally increase funding or by subordinate agreements such as those now being used for the RDD Project.

5. Negotiation of Reimbursement Amount

Reimbursement should normally be established in dollars based on the exchange rate at the time of negotiation. This procedure will prevent the problem of insufficient funds, to cover the agreed upon level of activity, arising from deteriorations in the value of the dollar. We have established a procedure for the Rural Works project which results in the Afghani estimate being converted to dollars at the exchange rate in effect on the date the USAID Director signs the individual Project Agreement. The

RDD then assumes the risk of exchange rate gains or losses from date of signing to date of payment.

There are several advantages to establishing the dollar amount at the time we agree to the reimbursable cost. The most obvious problem of converting Afghani reimbursable costs to dollars on the reimbursement date is that the dollar amount of grant funds committed for an individual project segment cannot be accurately determined until payment is made. Practical application of this policy of converting at time of negotiation will require project planning which precludes a long elapse of time between agreement dates and payment dates.

6. Renegotiation Provisions

Unexpected events beyond the control of US or Afghan Governments may occur during project implementation which will justify renegotiation of the reimbursement amount. Such events would include dollar devaluations and natural disasters but would not include ordinary cost overruns or other variations between estimated and actual costs. We should not open the door to a variety of renegotiation petitions, but it may be advisable to include a ProAg provision for renegotiation if an event occurs which materially effects the implementation of the project. In order to make it legitimate for the Mission to renegotiate when external factors make it desirable, it may be desirable to state an "intent" when specifying reimbursement, such as "the intent is to reimburse for a listed bill of materials."

7. Implementing Agency Cash Flows

We must determine that the GCA will have available the cash necessary for operations before projects are undertaken. Additionally, we must review the adequacy of total project funding to determine if the implementing agency can complete the project before receiving the reimbursement from AID. Advances can be made and subsequently recovered through deductions from reimbursements, but providing advances partially defeats the primary purpose of the fixed cost reimbursement procedure, i.e., thatthe implementing agency will assume the risks of poor project management. If advances must be made to assure project achievement, no more than 10 to 15% of US funds should be "at risk."

We may wish to require the use of a "blocked" bank account to ensure that funds are available before projects are undertaken. This concept would require that the GOA deposit funds in a local bank account and

that the funds be used by the implementing agency solely for project costs. AID reimbursements for completed segments of the overall project could also be deposited in the blocked account if the GCA wishes to avoid total advance funding.

We do not know how the GCA will budget funds for these projects or how reimbursements will be treated. The Ministry of Finance may provide total project financing and require that reimbursements be paid directly to the Ministry, or implementing agencies may be given only the GCA portion of project financing. It would be advisable for us to meet first with the Ministry of Planning to discuss the FCR procedure in detail and to then suggest that Planning meet with Finance. We should attend this latter meeting to provide explanations and offer suggestions, but the Ministry of Planning should initiate these discussions with the Ministry of Finance.

8. Unacceptable Work

Prospective B/G's should be cautioned that reimbursements will not be made for completed projects which fail to meet predetermined requirements. Unacceptable work and denial of reimbursements will obviously produce severe problems for the implementing agency. Unacceptable construction can be minimized or prevented through application of adequate construction standards and properly-timed, adequately-performed engineering inspections.

One problem we must face is that of assuring that the implementing agency does not get an unabsorbably large investment in a substandard project before the issue of substandard work is raised. That is, the realities are that we will get into a difficult political situation if a GOA agency gets a large (by its standards) commitment which we refuse to reimburse because of our assertion of substandard work. At least in the beginning, our rate of inspection must be adequate to prevent the occurrence of situations where the GCA's losses are so great that they would seriously fight nonreimbursemen

9. Construction Standards and Inspections

The social and economic requirements for AID-financed projects can be evaluated before construction is undertaken, and we can assume that these requirements will be met to our satisfaction as a prerequisite to project approval. Acceptance of the project for reimbursement will therefore be essentially an engineering determination. The USAID engineer will approve design plans and construction specifications, inspection plans,

project sites and final construction. No reimbursements will be made until the Controller receives a certification from the USAID Engineer that the project has been completed in accordance with predetermined standards and specifications.

Project plans must clearly state how and when inspection will take place, the standards to be employed, the procedures for certification and rejection, the channels for communicating deviations, the GOA commitment to the procedures and the GOA's obligation to react.

10. Uniformity of Approach

There will be a wide variety of implementation procedures followed in completion of future FCR projects, and we should expect a similar variety of financing requirements. These will probably be variations in our approach to "additional cost" financing, percentage of reimbursement and perhaps advances. There variations should be determined on the basis of suitability for project implementation and should be explained to implementing agencies before project agreements are finalized. We must avoid giving the impression of multiple standards in applying the FCR procedure.

11. Audit

Borrowers and grantees should be advised that the Fixed Cost Reimbursement Procedure cannot preclude legal requirements for right of audit.

COPY ANNEX 3

United States Government
MEMORANDUM

TO : All Division Chiefs Date: January 31, 1975

FROM : Vincent W. Brown, Director

SUBJECT: Fixed Amount Reimbursement Procedure

The Mission's policies for implementation of the Fixed Amount Reimbursement (FAR) Procedure were set forth in a memorandum from the USAID Controller which was distributed to you on December 15, 1974. The following paragraphs provide additional guidance and should be treated as a supplement to that memorandum.

1. Achievement of Stated Project Purposes

The FAR technique should be used as a means of achieving stated project objectives. If the objectives described in project papers and other project documents include specific numbers of buildings or other structures which must be constructed to achieve the project purposes, then sufficient funds, based on reasonably firm cost estimates, must be budgeted to complete the stated number of units to be constructed. Conversely, if achievement of project purposes is not dependent on construction of a given number of structures, e.g., the intent is to assist the grantee in developing a capability to construct such structures, then the project paper and other project documents should clearly state that the units to be constructed will approximate a given number and that the specific number will be subsequently established when verifiable cost estimates are developed. It may be possible in the latter case to establish the number of units at the PP stage with reasonable certainty if firm cost estimates are available when the project paper is prepared. We expect to improve our techniques as we acquire additional experience with FAR cost estimating.

2. Evaluation of Cost Estimates

USAID disbursements under the FAR procedure are "fixed" by amounts approved in Project Agreements, Letters of Understanding, or other cost estimation agreements which are signed by the Mission Director. Primary responsibility for the final review and approval of cost estimates prior to their inclusion in these agreements rests with the USAID Controller. Under present procedures, the Controller's review

Memorandum to: All Division Chiefs
Subject: Fixed Amount Reimbursement Procedure

and approval must be preceded by an engineer's evaluation of all components of the cost estimate. Responsibility for the engineer's evaluation and approval of the cost estimate rests with the Chief of Capital Development and Engineering. A recent AAG audit report includes the following observation:

> "At the time of our audit, most Mission divisions were involved to some extent in the time-consuming task of checking GOA cost estimates. This problem was exacerbated by the lack of Mission guidelines and procedures to be used in checking GOA estimates. Several different approaches were being taken by the various Mission divisions in examining GOA cost estimates. The approaches were based on different concepts, and the results were often different, depending upon who was doing the analysis. Thus, as a minimum, policy should be set as to who checks the estimates and which procedures are to be followed in the reviewing process."

Division Chiefs, project managers and technicians should obviously be concerned with the financing of project implementation. However, the evaluations of construction cost estimates should be performed by CDE and the USAID Controller as described above. CDE will call upon the assistance of project technicians and other officers as required. The resulting coordinated approach to the evaluation of cost estimates should avoid duplication of effort and provide consistency in applying evaluation procedures.

CO:TMcMahon:ml:1/31/75

Distribution:
DP:RARogers
CDE:JStandish
PARD:ALanza
EDU:ALanza
TO:RBrandt
MGT:HBrown
POP:CRGurney
CO:TMcMahon

Clearance:
DP:RARogers (in draft)
CDE:JStandish (in draft)
DD:FHSligh (in draft)

ANNEX 4

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR
FOR THE BUREAU FOR NEAR EAST

From : Vincent W. Brown, Director, USAID/Afghanistan

Problem : This request is to obtain Proprietary Waiver in accordance with AIDPR subpart 7-3.101-50 (d)(2):

(a) Cooperating Country: Afghanistan
(b) Project No. 306-11-590-144
(c) Project Title: Basic Health Services
(d) Funding: PH (Non-Title X)
(e) Description: Management Sciences for Health, Inc. Contract No. AID/pha-C-1037

MSH

Discussion: AID entered into a contract with the Management Sciences for Health, Inc. (MSH) Cambridge on July 15, 1973 to provide technical services to the Government of Afghanistan, Ministry of Public Health, in developing the public health operations and management aspects for health and family planning programs. This contract was funded under project 306-11-570-110 - Population/Family Planning and is presently funded through June 30, 1976. In the FY 1976 Congressional Presentation, activities under project 110 were integrated with new Basic Health Services Project 144 with expanded scope. It was not envisioned by USAID that because of a project number change (from 110 to 144) there would be a need for a Proprietary Waiver; however, recent direction from AID/W states this is a legal requirement both for this MSH project component and for the Auxiliary Nurse Midwife training component currently administered through an AID contract with the University of California at Santa Cruz (UC/SC).

Justification: MSH has performed well under its contract from 1973 to 1976. During this period MSH has built into its organization an exceptional knowledge of the Afghan health sector based upon research completed by the MSH team in Afghanistan and by personnel of MSH headquarters in Cambridge, Massachusetts. Justification for the new Basic Health

Services project rest in large measure on the findings of the MSH organization, including their extensive field survey in the Parwan Province. For the Basic Health Services Project, USAID will be providing assistance which will be administered through three key Presidencies of the Ministry of Public Health. These are: Presidency of Coordination and Planning, including the Division of Construction and Engineering; the Presidency of Administration; and the Presidency of Basic Health Services. Each of these Presidencies has maintained a counterpart relationship with the team of four MSH advisors. Each of these Presidencies will continue to be direct counterparts for USAID and the contractor advisors. There is not another organization or institution in the US which has this experience in Afghanistan's Health Sector. We conclude that continuity of an experienced organization is a strong justification for the requested Proprietary Waiver.

In Afghanistan, USAID projects are administered through the Fixed Amount Reimbursement procedures (FAR), by which USAID reimburses the Government of Afghanistan after it has demonstrated a specific level of performance agreed to in the Project Agreement. Afghanistan is also one of the countries where USAID has implemented the Planned Performance Tracking (PPT) system. In this system, Critical Performance Indicators (CPI) are charted before a project is implemented; the indicators are closely monitored and reported monthly to AID/W. Both FAR and PPT require that project inputs - by the Government of Afghanistan, by USAID and by other donors - be timely. One of USAID's major inputs to the Basic Health Services project is to be a management advisory team. In USAID's judgment, if this team is not at full strength within eight to twelve weeks of the July 1 implementation date, then almost all other project indicators will slip and the integrity of the project design could not be maintained. Putting the contract to bid would seriously delay and jeopardize the entire project.

Finally, we refer AID/W to the Bibliography Annex of the Basic Health Services Project Paper in which are listed the fifteen more important

reports and papers prepared by MSH during the past three years. This represents a major effort in, and contribution to, the health sector of Afghanistan.

Recommendation: For the reasons enumerated above, I have concluded that procurement of these services from MSH are vitally essential to the USAID operations in Afghanistan and are consistent with the objectives of the foreign assistance program. I, therefore, recommend that you approve this request for Proprietary Waiver.

Approved:_____

Disapproved:_____

Date:_____

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR
FOR THE BUREAU FOR NEAR EAST

From : Vincent W. Brown, Director, USAID/Afghanistan

Problem : This request is to obtain Proprietary Waiver in accordance with AIDPR subpart 7-3.101-50 (d)(2):

(a) Cooperating country: Afghanistan
(b) Project No. 306-11-590-144
(c) Project Title: Basic Health Services
(d) Funding: PH (Non-Title X)
(e) Description: Auxiliary Nurse Midwife Training
Contractor: University of California
at Santa Cruz (UC/SC)
Contract No. AID/pha-C-1062 (Afghanistan)

Discussion: AID entered into a contract with the University of California at Santa Cruz (UC/SC), California on July 30, 1974, to provide technical advisory services to the Government of Afghanistan, Ministry of Public Health, in the development of training programs in health, midwifery, and family planning for young, rural Afghan women having limited education (minimum sixth grade). This contract was funded under project 306-11-570-110 - Population/Family Planning and is presently funded through June 30, 1976. In the FY 1976 Congressional Presentation activities under project 110 were integrated with the new Basic Health Services project 144, with the same scope of work. It was not envisioned by USAID that because of a project number change (110 to 144) there would be a need for a Proprietary Waiver; however, recent directions from AID/W states this is a legal requirement both for this UC/SC project activity and for the Management Advisory (MSH) activity.

Justification: The scope of work for the Auxiliary Nurse Midwife training component of the Basic Health Services project is not being changed in any significant way. Two advisors will continue to be required. The

scope of one of the advisors will be increased to show some of the responsibilities planned for a direct hire Public Health Nursing Advisor which USAID was unable to provide, although agreed in the Project Agreement. The scope of both advisors will be expanded to cover field duties which relate the Auxiliary Nurse Midwife school in Kabul to the graduates assigned in the rural Basic Health Centers, i.e., an institutional linkage and post-graduate, in-service training component. The tours of the present two advisors do not end until the fall of 1976.

Participant training at the UC/SC campus for members of the faculty of the ANM school is another important activity managed by this contractor. UC/SC has developed programs especially for the Afghan participants.

USAID/Afghanistan's programs are administered through the Fixed Amount Reimbursement (FAR) procedure by which USAID reimburses the Government of Afghanistan after it has demonstrated a specific level of performance agreed in the Project Agreement. USAID Afghanistan is also one of the Missions where the Planned Performance Tracking (PPT) system is being tested. In this system, Critical Performance Indicators (CPI) are charted before a project is implemented; the indicators are closely monitored and reported monthly to AID/W. Both FAR and PPT require that project inputs be timely. The USAID inputs provided through the UC/SC contract are significant. If USAID does not provide these inputs in a timely fashion, the integrity of the project design is jeopardized. Asking for bids on a new contract would result in delays of many months.

USAID also wishes to call to AID/W's attention the fact that when this project was approved in 1973, it took more than a year to locate any US institution willing to bid on the contract. The advisors were not on duty in Kabul until near the end of 1974.

Recommendation: For the reasons enumerated above, I have concluded that procurement of these services from the University of California,

Santa Cruz, are vitally essential to the USAID operations in Afghanistan and are consistent with the objectives of the foreign assistance programs. I, therefore, recommend that you approve this request for Proprietary Waiver.

Approved:_____

Disapproved:_____

Date:_____

SOCIAL ATTITUDES, BELIEFS AND PRACTICES THAT AFFECT THE NUTRITIONAL STATUS OF PREGNANT WOMEN, LACTATING MOTHERS AND YOUNG CHILDREN IN THREE AFGHAN VILLAGES

By:

Mohhamad Afzal Pakmal

1354

WE UNDERSTAND THIS
IS 97% LOCAL
AUTHOR

TABLE OF CONTENTS

BELIEFS AND PRACTICES THAT AFFECT THE NUTRITIONAL STATUS OF PREGNANT WOMEN, LACTATING MOTHERS AND YOUNG CHILDREN

1. INTRODUCTION:

The investigator believes that nutrition is affected by a number of socio-cultural and economic factors, and as such should be given due attention in any study that focuses on the nutritional status of a given community. The importance of economic factors in relation to what people can procure (produce or buy) to eat is obvious, but to claim that all one has to do to improve the nutritional status of a community, or a group in that community is to evaluate its economic standards is assuming a little more than what could be substantiated by real life experiences. Improved economic status or greater buying power need not lead to the allocation of more money or resources for the purchase of food items or foods that are essential from nutritional perspections. What one considers edible and more important what one regards as essential or attaches more prestige to are the types of questions that could be answered in terms of the value system that prevails in the community, and which guide one to make the choice among the things that are available in the community. In dealing with such issues, and trying to find logically sound answers to questions of this type, the investigator would need to learn a great deal about Man the Social - his likes, dislikes and fears as they relate to his eating, rather than the abstract economic man.

The amount of food stuff that finds its way to the family kitchen cannot and in fact should not be taken as a true indicator of the quality and the quantity of food consumed by the family as a whole or its individual members. It is obvious that practically every food item has to be cooked before eating, and the method of cooking implied would affect the quality and even the quantity of food prepared.

The study of these techniques and the assessment of the possible losses both in terms of quality and quantity is of importance for knowing the nutritional values of the food that is ready for the family consumption. Furthermore, the cultural values and the behavioral norms and patterns related to the manners of eating and more specifically the socially accepted pattern of food distribution on the table, that is who is served first and gets the best choice, etc. means a great deal in places where food is not as abundant as would be expected. Hence to study this pattern and to learn about its basis is a good piece of information for revealing the nutritional status of individual members or age-sex groups.

2. SCOPE AND PURPOSES OF THE STUDY:

Although the issues raised above and many others are essential in the study of nutrition, to cover all of them was beyond the limits of the present undertaking. The investigator's main purpose in this study was to learn, if there are any food items that certain age-sex specific groups would eat even if available. More

specifically, the investigator wished to focus attention on those social attitudes, beliefs, and practices that regulate the food intake of pregnant women, lactating mothers, infants and children up to the age of six.

Additionally, in traditional societies pregnant and lactating mothers are not only subject to the rules that dictate what they should and should not eat, but are also expected to conform to a set of clearly defined situationally specific behavioral norms in a number of social and cultural events. The investigator wanted to find out what are these events, and how the two categories of women were expected to behave when confronted by them. The investigator was also interested to learn how sterility was viewed by the respondents in the community subject to this study, and whether there were any locally developed remedial procedures? and if so, what were they?

3. RESEARCH DESIGN AND METHODOLOGY:

The lack of systematic information in regard to food restricting rules as they relate to the groups that are the concern of the study left the investigator with no alternative, but to keep the aim at the exploratory level. The investigator assumed that certain factors, namely economic status, ethnicity, educational attainment of the family and urban influences flowing in to the community, would be to some degree related to the presence or absence of food specific values and beliefs as they apply to the groups of concern.

To meet the specifications stated above at an acceptable and manageable level, it was decided to select three villages, two in a rural setting far removed from urban centers, each representing a distinct ethnic group, preferable Tajik and Pushtoon (the two dominate groups numerically), and the third village Tajik in ethnicity, yet close to a major city, so that it would enable the investigator to assess the possible degree of the city impact on these values and beliefs. The two villages, Bala-Deh and Shah-noor, designated as most rural, are located in Nijrab district, Kapisa province and Kunar major district, respectively. The third village Khatir, which is a part of Deh-Sabz district is located in the vicinity of Kabul City.

In the selection of the sample at the village level, attempts were made to take into account several factors that could be thought of as possible causes of differences in attitudes related to food or the clustering of the informants as far as these attitudinal variations were concerned. Villages in Afghanistan are of pure ethnic and religious types, the three villages chosen being no exception, and as such, neither religion, nor ethnic affiliation were taken into account. The other attitudes that were differentially distributed in each of the three villages that the investigator thought were associated with the food attitudes on the one hand, and

about which data could easily be obtained in the field, on the other, were educational attainment of the family, [1] and its economic status. [2]

In the light of these criteria all the families in each of the three villages were grouped to educated and uneducated, and rich, middle, and poor. As a next step in each village, a 10% sample was drawn randomly, which was comprised of the elements of each of the five categories mentioned above in proportion to the size of each in the total population of the village. The final sample included 52 families, of which 20 were in Bala-Deh, Nijrab district, Kapisa province, 18 families in the village of Khatir, Deh-Shabs district, Kabul province. While the village of Shah-Noor, Kunar major district is represented by 14 families. In addition to this, however, in each village the investigator tried to interview at least one woman (either in the village or outside of it) who was regarded as knowledgeable about nutrition in general and child care in particular.

Table I: Distribution of the Families in the Sample by Educational and Economic Status

	Khatir Village			Bala-Del Village			Shah-Noor Village		
	Rich	Mid.	Poor	Rich	Mid.	Poor	Rich	Mid.	Poor
Educated	4	2	0	4	1	7	3	0	0
Uneducated	0	2	6	0	1	7	0	2	9

The field worker in each of the villages was conducted by one interviewer, who was at the same time a native of the village. All three interviewers were graduates of the Faculty of Education in Kabul University. Of the three, two were

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1. For the purpose of this study, high school was accepted as the minimum level of educated, because the investigator believes that only education of this level could be of relevance to these values and beliefs, Based on this interpretation any family that had at least one such member was designated as educated, and those with none as uneducated.

2. In ascertaining the economic status of a family, first a list of all the families in the village was prepared and with the help of two well informed villagers the income of every family was estimated. The income of all the families was added and the sum total divided by the number of the people in the village, which gave the per capita income. Any family whose income per member was larger than that of the village as a whole was regarded rich, if equal, middle, and lower, then the per capita income of the village was specified as poor.

assistants in the Department of Social Science, Faculty of Education, while the third one was a female who was teaching in one of the girls lycees in Kabul. As a group the field workers were given a week of intensive training with regard to interview techniques, and the problems that could be anticipated in the field, and how to deal with them should they arise. Special attention was given to familiarize the interviewer criteria adopted to assess the educational attainment and economic status of the family.

Each interviewer stayed in the village of assignment for a period of three weeks. Each of them was visited by the investigator at least once for the purpose of discussion and to help them overcome any problems they may be facing. The data were collected through the use of a questionnaire prepared by the author in consultation with Dr. R. Newell, UNICEF consultant. Also every interviewer was asked to record any observation they thought was related to nutrition.

The interviews lasted for two hours on the average. Rechecking was done quite often at the start and rarely at the end as the field workers gained experience. Women being the main focus, all interviews took place in the homes of the informants. Being natives of the village, the interviewers proved quite instrumental by not attracting crowds, which is usually the case when an interviewer is an outsider. No difficulties were experienced and not a single of the informants refused or even hesitated to answer the questions. This again in the investigators opinion was due to the fact that the person asking the question was not a stranger, but actually one of them. These factors in combination made the interviewing situation quite pleasant both for the interviewer as well as for the informants.

4. BRIEF DESCRIPTION OF THE VILLAGES:

a. The Village of Bala-Deh·

It is situated in the central part of Farookh-Shah, one of the five villages that constitute the district of Nijrab, Kapisa province. This village is located at a district of about 8 km. from the district official seat, the point at which the dirt road terminates. This means that it is the closest place, where a bus could be caught, but only early in the morning in case a villager should wish to go outside the community. To cover the distance separating the village from its official seat is a pleasant exercise during the summer but is quite a demanding task in the winter and during the rainy seasons.

Farming and animal husbandry comprise the two main activities in which the majority of the village residents are engated and from which they derive the main portion of their livelihood. Farms are generally small in size, particularly when compared to those in the north and the northwest of the country.

At the same time we found that almost every one is an owner regardless of the size of the land which is owned. The largest size of the farm owned by a single family did not exceed the limits of 15 jeribs, while the smallest piece of land owned consisted of a small plot of land with few trees, Usually mulberries, and walnuts, wheat, corn and rice are the main crops grown in the valley, while a few plants of potatoes, tomatoes and other vegetables attract ones attention here and there. The sale of fruits, particularly dry mulberries and walnuts, brings in some cash to the community.

The farm being small on the one hand, and the scarcity of locally available employment opportunities on the other, pushes the people outside their immediate community. Such an outflow of population, however, is temporary as well as sex-age selective. It is temporary because all of these who go outside return with their earnings. It is selective in a sense that only young male members of the family do so. It seems that a good majority of these job-seeking individuals go to Kabul where in the opinion of the villagers job prospects seem brighter than anywhere else.

The river running in the valley provides water for irrigation purposes, while that from the springs is used both for irrigation as well as drinking and cooking. Both of these sources of water are quite dependable and together provide more water than could be utilized by the available farm lands, the scarcity of which is felt very strongly by the village.

A number of services essential for farming as well as daily life of the village are provided by well experienced self-trained local craftsmen. Blacksmiths and carpenters are permanent residents of the community. The same holds true for the barber. Carpenters offer such services as making doors, windows and repairing the wooden parts of agricultural tools. Blacksmiths make shovels, speeds and plows. Both of these artisans are paid once a year in kind at the end of the harvest season. Barbers who cut hair and circumcize boys are paid in the same manner.

There were two primary schools, one for boys and another for girls, at a distance of three km from the village, each of them attended by the children of the surrounding villages. Particularly all school age children except the very poor attend school, even if a good number of them do not stay in school up to the time of graduation. The middle school and the lycees, both for boys, absorb the graduates of all primary schools scattered in the area.

The mosque, while serving mainly as a religious institution, offers classes for the village children, although greater emphasis is placed on religious teachings, moral instructions, classic Dari literature and writing. While attendance in these classes is not compulsory, every child in the village takes part in them. The size of the classes in the mosque reaches its peak

during the winter months and falls rather suddenly as the working season approaches. One of the main attributes of these classes is that each child is instructed individually and how much he is taught in a day is subject to how much the child can learn.

b. The Village of Shah-Noor:

This village is located in Mazar Dari and Noor Gul subdistrict, Chouki district, and Kunar major district. A dirt road running to the village makes it rather easily approachable by modern means of transportation. There are two buses that run from the village to the city of Jalalabad on a daily basis.

Like in the first village farming and animal husbandry form the backbone of the village economy. The scarcity of agricultural land is felt to a greater degree than that in the first village. Here the largest individual land holding was not more than 7 jeribs. Wheat, corn and rice are the main crops grown in the area. The sale of rice constitutes the main source of cash income.

Similar to the first village, scarcity of land and limited employment opportunities make seasonal migration an unavoidable necessity. Once again it is the young male member of the family rather than the family as a unit who goes in search of a job to the city of Jalalabad, which is a fast developing city in the country, mainly as a major winter resort and as the site for a huge land reclamation project.

The river running along the valley and a number of springs provide water for all purposes - irrigation, washing and drinking. During the summer, people in the village as a custom fill the holes they dug with spring water for drinking purposes for two reasons; firstly, that the water becomes clear as all foreign materials precipitate to the bottom and secondly, the water gets cold. The major services for daily living and farming occupation are provided by community based experts, in the same fashion as that of the first village.

There are two schools, one primary for girls, and the second one a lycee for the boys, both located at a distance of about 3 km from the village, like in the rest of the country, the desire to send children to school is on the rise. The case of the mosque school is exactly like that in the first village.

c. The Village of Khatir:

This village is a part of the Deh-Sabz district, Kabul Province, which is located about 5 km north of Kabul City, and one km west of the road to Kabul International Airport. The city buses running to the airport make the city within easy reach for the village.

Farming and animal husbandry represent the main occupation of its inhabitants. Agricultural land is not as scarce as that in the other two villages. The largest farm size reached 80 jeribs, while the smallest land holding was reported as 3 jeribs. Water for agricultural purposes is provided by the stream that takes its origin from the southern part of the city, while water for drinking purposes is provided by the several wells dug by the villagers. Wheat, corn, tobacco, potatoes, onions, and tomatoes are the crops mainly grown in the village. Of these the first two are consumed by the family, while the remaining are sold as cash crops.

The close proximity of the village to the city, helps the residents of this community to earn some supplementary cash income from the city based on occupations. In nearly every family at least one member is engaged in one of such occupations. There are those who work as government officials, others who are engaged in shopkeeping, and a few who work as janitors in the offices.

There are two schools, one primary for girls and a middle school for boys. The graduates of both schools have the opportunity to enroll in one of the many lycees in the city that he or she wishes to attend. The situation of the mosque school is similar to that of the other two villages.

5. GENERAL CHARACTERISTICS OF THE SAMPLE

The family which is being accepted as the unit of analysis for the purpose of this study is defined as a social unit, the members of which live under the same roof, share the family kitchen and all wage earning members contribute their income to the common purpose managed by the elder male member of the family. In country life Afghanistan where people in general are living under pressing economic conditions the sheer size of the family means a great deal as far as the standard of living of the family and the welfare of individual members is concerned. It could have a decision role in regard to the quantity and the quality of food available per capita per day.

In the sample as a whole the investigator found not a single family to be represented by two members alone. Out of the total 52 families in the three villages, 18 were composed of 3-5 members, 25 families were made of 6-9 members, and 9 of them were of such a size that had ten or more members. By reducing the three size categories to two, namely 3-5 and 6 or more persons, we found that two-thirds of the families in the sample were actually large in size, that is having 6 or more persons. As data in Table I indicated, however, the so-called large size families are not distributed in equal proportion in the three villages, rather variations in this regard were observed. The highest percentage of such families (70%) were found to be in the village of Bala-Deh, and the lowest percentage (57%) of them were found in the Shah-Noor village.

Table II: Family Size in the Three Villages

Family Size	Khatir Village		Bala-Deh Village		Shah-Noor Village	
	Number	Percent	Number	Percent	Number	Percent
3-5	6	33.33	6	30	6	43
6-9	8	44.44	10	50	6	43
10 and Over	4	22.22	4	20	2	14

The reported variation in the size of the families particularly in the two villages identified as most rural, while unexpected, become intelligible only when viewed in terms of the prevailing economic condition in the two communities. The observation in the two villages in this connection, lead the investigator to assume that all other things being equal the degree of cohesiveness among the members of a family and their desire to stay together as a unit is to a greater extent a function of its economic status. That is, The Higher its Economic Status, The Greater Are the Chances that its Members Would Stay Together as a Social-Economic Unit, and Vice-Versa. The relatively large proportion of small size families (43%) in the village of Shah-Noor, in comparison to the other villages seems to confirm the assumption. The logic behind this assumption is that tight and pressing economic conditions are prone to give rise to such questions as to who works hard and who does not, who earns more or too little or none. Such a way of thinking gives rise to further arguments which gradually weaken the sentiments and the bonds holding the family members together, and leads slowly, but surely to the dissolution of the large extended families, to ones that are small. It seems quite obvious and in fact self-explanatory that under such conditions the most active members of the group perceive the chance for their survival and an upward socio-economic mobility to a far greater degree in separation than unity.

It is quite clear that under poor economic conditions the family size is quite an important factor in relation to its general standard of living, but obviously not the only one. A further element that the investigator believes is of significance in this respect is the distribution of the members to different age groups.

Table III: Distribution of Family Members by Different Age Groups in the Three Villages

Age Group	Khatir Village		Bala-Del Village		Shah-Noor Village	
	No.	%	No.	%	No.	%
0-5	32	25	40	28	20	21
6-14	35	27	44	30	31	34
15	62	48	60	42	42	45
Total	130	100	144	100	93	100

As data in Table III indicates, in the village of Khatir, of the total members in the 16 families, 25% are between the age of 0-5 years, 27% of them were found to be beyond 15 years old. The distribution of members into the same age groups was 28%, 30% and 24% in the village of Bala-Deh and 21%, 34% and 45% in the village of Shah-Noor. By collapsing the age categories from 3 to 2, that is to age group 0-14 and 13 years and over, we notice that 52% of the members in the village of Khatir, 28% in Bala-Deh and 55% in the village of Shah-Noor are 14 years and under. Such an age distribution if taken at its face value seems to be quite satisfactory. As far as the dependency ratio is concerned, it is almost 1-1 (assuming that those over 14 years of age can be gainfully employed). But if a further element is added to it, that is females and retired males, the picture changes quite a great deal. It is not unreasonable to assume that at least half of those over 15 years of age would be females and a few retired males, while some others who may not have entered labor market (schooling). Taking all these facts into account, it can reasonably be asserted that a man would have to provide for more than one person. Under the economic condition that prevails in the three villages, particularly the two that are designated the most rural, namely Bala-Deh village and the village of Shah-Noor, such a ratio seems to put a great burden over the shoulders of the bread winners, the negative consequences which are clearly reflected in all aspects of the family life, including its nutrition.

Among the respondents in the three villages the investigator found a great desire for having more children preferably of the male sex. The ability to have children is an attribute that was positively emphasized by the respondents. It would not be exaggerating in saying that the desire to become a parent is one of the socially expressed reasons for getting married. On the contrary the concept of birth control has not yet become a part of the ruralite way of thinking and may not become so in the near future. In their opinion to give life and to take one is in the hand of no one but Allah. The claim stated above and the tendency to have more children is rather well illustrated by the number of the total pregnancies that were recorded in the three villages. The reader should keep in mind while reading the figures in Table IV that the average reported pregnancies are not the maximum possible, as only one-tenth of our information appeared to have passed the limit of reproductive age. The fact is that the average pregnancies for this particular group in the future will not be the same as it is now.

On the average there were nine pregnancies per woman in the village of Khatir, 7.2 in Bala-Deh and 6.4 in the village of Shah-Noor. Notice should be taken of the fact that all these pregnancies because of still births are not carried to the end. Moreover a good percentage of children born alive die rather young.

Reading Table IV it is noticed that in the village of Shah-Noor 10% of all pregnancies were terminated prematurely, and 30% of the children born alive have not lived beyond the age of six. Of the total reported deaths, 42% have taken place before the age of one, 54% between 1-2 years of age and the

remaining 4% of the children were reported dead, when they were not yet 6 years old. In the village of Bala-Deh 5% of all the pregnancies were ended by still births. Of the children who were born alive, however, 48% were dead before the age of 14. As reported by the mothers, 42% of the children have died before they were one year old, 15% have passed away between 1-2 years of age, 20% between the age of three and six, and 23% were said to have died between the ages of seven and 14 years. In the village of Khatir 12% of the total pregnancies were said to have been ended by still births, and 27% of the children born alive did not live for more than six years. From the total death, 46% has taken place before the age of one years, 12% between 1-2 years of age and 42% of the deaths have occurred between three and six years.

Table IV: Frequency of Pregnancies, Live Births, Still Births and Deaths in the Three Villages

Village Name	All Pregnancies	Live Births	Still Births	% of deaths of those born alive
Khatir	163	142 (88%)	21 (12%)	27 (21%)
Bala-Deh	144	137 (95%)	7 (5%)	66 (48%)
Shah-Noor	88	79 (90%)	9 (10%)	24 (30%)

Table V: Percentage Distribution of Deaths by Age and Causes in the Three Villages

Village	Age				Causes of Death							
	0-1%	1-2%	3-6%	7-14%	Chicken Pox %	Whooping Cough %	Diarrhea %	Small Pox %	Turning Blue %	Delivery	Accidents	Unknown
Bala-Deh	42	15	20	23	18	24	16	6	3	7	5	21
Khatir	46	12	42	6	15	18	22	7	15	6	7	16
Shan-Noor	42	54	4	0	14	23	24	0	4	6	8	21

Among the causes of death, whooping cough, chicken pox and diarrhea are still the main killers in the rural villages. Whooping cough for instance has claimed 24% of the young lives in the village of Bala-Deh. The percentage of deaths due to this cause was reported 18% in the village of Khatir and 23% in the village of Sha-Noor. Chicken pox was the reported cause of 18%, 15% and 14% of deaths while diarrhea was held responsible for 18%, 25% and 24% of the children's deaths in the three villages respectively. Small pox had claimed only 5% of all the deaths in the village of Bala-Deh, 7% in the village of Khatir and none in the village

of Shah-Noor. As far as delivery is concerned, it presents itself as a threat for the mother as well as the unborn baby, but only in the areas where modern facilities are lacking. To this problem were associated 7% of all deaths in Bala-Deh, 6% in the village of Shah-Noor and none in the village of Khatir. Another factor that seems to threaten the lives of rural children, yet never reported are the various types of accidents. Five percent of all deaths in the village of Bala-Deh, 7% in Khatir and 8% in Shah-Noor were said to have been due to one of these accidents.

6. BELIEFS AND PRACTICES RELATED TO STERILITY

In rural Afghanistan, children of both sexes are regarded as an asset rather than liability. They are sought in order to share the load of work inside and outside the house, to act as a reliable source of dependency at the age of retirement, and last but not least to have someone to perpetuate the family. A childless couple feels deprived and experiences severe frustration as a result of it. Of the two, it is the wife who is held secondly responsible for it, values proved otherwise, which almost always means that the male marries a second wife and, if well-off economically, even a third one. If still no children, only then would he retreat and take the blame of being responsible.

The wife either out of ignorance or based on what others say, or both, takes the blame of non-motherhood and at the same time is not convinced that it is not curable. The interplay of this double reality, that is being childless and the ever present desire to escape it, have in the course of time given rise to the emergency of a number of techniques and practices that are meaningful to them.

In order to dig deep into the subject and learn more about the nature and content of these practices and techniques the respondents were asked as to what in their opinion can or should a childless woman do that will or may help her get a child. Responses to this question brought to the surface a number of techniques and beliefs that varied from each other in content as well as intention. Despite the variation, however, there was an element in common, that is every one was assumed to be aimed at the removal of a cause in a way that neither explains the nature of the cause nor does it say how would the recommended remedial step remove it. The whole story is founded on hope and belief. These beliefs and related practices are dividable into two logically distinct groups as follows:

1. Those who believe that the cause of sterility to be in the realm of supernatural, and;

2. That set of assumptions that see the cause in the person involved.

Those who adhere to the first cause listed above believe at the same time that the cause or better the share of cause is beyond the human world, hence, no human intervention can prove of any use in this regard. To them the most appropriate and logical steps are visits to the holy shrines and the use of amulets.

They are considered so as they deliver their unperceivable power and influence from the very source where the cause is.

The respondents in the three villages differ quite a great deal from each other, as far as the degree of belief and the extent of their reliance on these sources are concerned. In the village of Shah-Noor for instance all those interviewed placed a great deal of trust and confidence in the visits to the holy shrines and the use of amulets as a means to be explored by the childless woman. They even told us they consult the same sources when they desire a male child or in case one is sick. In the village of Bala-Deh, on the other hand, only 40% of those interviewed expressed such a belief, the number of such believers dropped to 8% in Khatir.

The informants who had such an orientation were mixed in terms of educational attainment and economic status, that is, some belonged to educated families, others did not, and in the same way economically. The observed variation in the responses in relation to the supernatural causes of sterility in the three villages cannot be explained in terms of either of them. The similarity of the two villages designated most rural, Bala-Deh and Shah-Noor, in all respects, but ethicality, however, led us to conclude that the variation in the responses discerned in both can be explained in terms of ethnicity. As far as the differences in response to the two Tajik villages (Khatir and Bala-Deh) were concerned, the investigator could not think of any other variable, but the different degrees of urban influence that each was subject to.

The second cause, that of sterility-bound attitudes and beliefs that assume the cause to be in the person of the woman, is in itself divided into two separate groups. (1) Those that recommend physical manipulation as a remedy, and (2) those which advocate the use of folk medicine for removing the cause of sterility.

In respect to the physical manipulating techniques, and more particularly in regard to the extent of their use, noteworthy differences were found in the three villages. In this case once again it was observed that people in the village of Shah-Noor used this technique in a far greater proportion than those in the other two villages.

In the first village, 30% of the respondents were said to have either used the clay jar techniques [3/] themselves or have advised others to do so. In the village of Bala-Deh 20% of the respondents made references to it, but due to the great

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3/ Steps involved in the use of the clay jar:

a. An ordinary clay jar (villagers use it as container for yogurt and milk) is heated, to the degree that will not burn the hand of the person who uses it.
b. A ball of dough is spread thinly and placed over the open end of the jar.
c. The jar is turned upside down and placed over the naval of the woman, and is twisted from left to right. NOTE: It is assumed that such an operation will clean out the impurities that may have logged the womb.

degree of pain involved hesitated using it themselves, In the village of Khatir on the other hand, only 8% of those interviewed mentioned that they have heard of it being used. To explain such a variation, the investigator could not think of any other reason but the ones offered in relation to the supernatural cause of sterility.

The data related to the variety and the extent of the use of folk medicine proved so rich in content on the one hand and the differences in relation to it so widespread in the three villages on the other, that the investigator has put forward the hypothesis that "The Degree of the Belief in the Supernatural Causation of Sterility is Inversely Related to the Variety of Folk Medicine and the Extent of its Use. That is, the Stronger the Belief in the Former, the Fewer is the Variety and the More Limited is the Extent of the Use of the Latter. For instance in the village of Khatir (only 8% stated to have visited holy shrines in relation to sterility), we found that the informants not only knew 18 different locally prepared prescriptions, but have used one or the other of them personally.

In the village of Bala-Deh (40% believed in the supernatural cause of sterility).[5/] We found 8 such prescriptions, but in the village of Shah-Noor where all informants were convinced of the supernatural causes of sterility only two prescriptions were known and used as though necessary.

7. BELIEFS, ATTITUDES AND PRACTICES THAT REGULATE THE NUTRITIONAL STATUS OF PREGNANT WOMEN, LACTATING MOTHERS AND YOUNG CHILDREN (UP TO TWO AGE OF SIX):

A, Pregnant Women:

Pregnancy is regarded as one of the socially significant and physically crucial events in the life of a married woman. Therefore, great cautions are taken to safeguard its safety and insure its normal continuation to a happy end. In the three villages studied we found a number of beliefs that state what a pregnant woman can and cannot eat. They all appear to be focused on one main issue that is to protect and maintain her health, which in the respondents opinion has a direct bearing on the well being of the unborn baby. Those aspects of her health, that proved to be of keen interest in this regard, were digestive irregularities (diarrhea, constipation, stomach ache, excessive stomach gas), skin irritations, and pains and swellings of the joints. The data at the investigators disposal revealed that the informants in the three villages not only knew health problems should be avoided, but were also certain of knowing how to avoid them

4/ The domain of folk medicine proved so rich in nature that it was decided to postpone its full coverage for a separate paper.

5/ The technique is indicated in connection with sterility however, are not limited to it, but any unusual delay in the onset of the next pregnancy calls for its use.

They thought that certain food items if eaten, can give rise to one or a number of these problems, and as such their consumption should be avoided by expecting mothers.[6/]

Respondents in the two Tajik villages viewed beef and buffalo meat with suspicion as food items for pregnant women. Both of these were thought to cause such health problems as diarrhea, stomach aches and pains and swelling of the joints, all of which are assumed to be detrimental for the continuation of a pregnancy. Camel meat was avoided for no other reason than the fact that it elongates the course of pregnancy, which seems not to be pleasant news for those who are pregnant. These beliefs were common and held true for all respondents in the two villages, irrespective of their educational attainment or family economic status. In the village of Khatir, however, we found an interesting belief which said that the unwanted consequences that are associated with camel meat will not come to reality if the husband joins his wife in eating.

Fish received a highly negative ranking as a food item for pregnant women by the informants of the village of Bala-Deh. The reason given was that it leads to skin burning and other skin disorders. In the village of Khatir, however, it was not considered harmful but in fact received a positive evaluation as a food item for those who are pregnant.

Informants in the village of Bala-Deh named a number of vegetables, such as potatoes, peas, beans, and pepper as unfit for the group under concern. The first three for the reason that they are hard to digest and as a result cause stomach aches, while the latter as a skin irritation item. In the village of Khatir a different group of vegetables such as raw onion, house leeks and carrots (all abundant in the village) were perceived negatively as food items for the expecting woman. The reason stated for not eating them were their association with skin irritation and excessive gas formation in the stomach.

A number of fruits were known to be unhealthy for the pregnant woman. Quince, apricots and apples were so regarded by our informants in the village of Bala-Deh, thinking of them as non-juicy and as such difficult to digest. In the village of Khatir only apricots were so evaluated. Respondents in both villages were in full agreement as far as the unhealthy consequences of vegetable oils were concerned. It was thought, that the oil weakens the body and the heart of the pregnant woman. It is obvious that a weak body cannot be a good host for the unborn baby. A number of other food items mentioned by one or another informant that they do not eat when pregnant for no reason but personal dislike and because of this did not qualify to fall in with the content of food avoidances that are based on cultural values and beliefs. As such they were not treated here.

6/ In the village of Shah-Noor the respondents referred to no food item that should be avoided by all pregnant women, instead in this village the kinds of food to be avoided by pregnant women were said to be subject to the hot, cold dichotomy that will be discussed shortly.

As mentioned earlier, people in the village of Shah-Noor treated the subject of food as it related to expentant mothers from a completely different perspective. In this village it was not the pregnancy that was used as a point of reference to decide whether a given food item was suitable or not for the expecting lady, but rather the nature of the individual woman was used as a basis for such a decision. Through interviews it was learned that in this community practically all foods (grown and raised locally or brought from outside), sickness, and persons are regarded as either cold or hot in nature. As a rule in this dichotomized world the elements from the opposite class are taken to be congruent with each other. Hot foods are best for individuals who are cold in nature and cold foods are regarded for those who are hot natured. The same holds true for sicknesses.

In theory everyone is expected to follow these rules and eat foods that are compatible with his or her nature of being (hot-cold), but in practice however, it is seldom and in fact never observed unless and until the person becomes sick. Pregnancy which is seen as a normal state of sickness is not an exception to these rules which means that pregnant women are expected to follow what is dictated to them by their individual nature.

Questions related to the hot-cold nature of foods and sicknesses are settled in advance and the information pertaining to them is a part of the village oral tradition of the community. It is not the same with human beings as it differs from one person to the other. This means that every individual case has to be dealt with separately as the circumstances may call for. Through interviews we learned that there are three distinct methods each relying on different cues, used either individually or in combination for diagnosing purposes, which are presented in an itemized manner below:

a. Facial Cues:

   1. Dark looking greasy face, thick cracked lips means hot nature.
   2. Pale looking face, thin lips, with white layer are signs of cold nature.

b. Pulse Movement:

   1. Fast beating pulse means that the person is cold in nature.
   2. Slow beating pulse is the indicator for hot nature.

c. Appetite:

   1. Good appetite means cold nature.
   2. Poor appetite means the person is hot natured.

d. Some Examples of Hot and Cold Foods:

Cold Foods	Hot Foods
Young Chicken	Old Chicken
Yogurt	Mutton
Butter	Milk
Whey	Clover
Goat Milk	Fish
Beef	Duck
Raw Eggs	Fried Eggs
Citrus fruits	Mulberries
Pomegranates	Walnuts
Green Tea	Almonds
	Black Tea

On the basis of what has been discussed we can reasonably conclude that: (1) food restrictions related to pregnant women are the outcome of believing in something wrong, and yet not knowing what is believed is not only wrong but detrimental for the very thing they wish to maintain or for that matter prevent from happening; and (2) those beliefs and attitudes while technically wrong are at the same time so deep-rooted in the tradition of community and so firmly interwoven with the personality structure that to change then would require an extensive exposure to a different value system that is not supportive of these attitudes and beliefs.

In the three villages studied it was found that pregnant women are not only subject to food restricting rules, but are also expected to behave in accordance in the situationally specific norms under a number of socio-natural events. According to our observations in the three villages, it turned out that conformity to these rules is far greater than those dealing with food. This is so because all these events are assumed to signal the presence of being unperceivable by man yet stronger than him, and ...capable of harm that can hardly be cured once affected. In the following is presented a rather brief manner of the findings in the three villages in regard to the natural and social events as they relate to pregnant women.

1. Natural Events:

a. Eclipse (sun-moon) - The interviews in the two Tajik villages revealed a number of interesting beliefs and practices in relation to these natural phenomena. Informants, in these villages were of the opinion that under either of these events the pregnant woman shall avoid scratching her body, abstain from the use of the scissors, needles and eating. Scratching the body was thought to lead to the appearance of a black or red spot on the baby's body, the use of a knife, scissors or needles or any other sharp instrument for that matter

were said to cause cut lips or some other possible deformity of the baby, while eating was thought to cause the formation of a lump in the child's throat. We were rather surprised to hear a few mothers say they had seen some of these things happen in cases where these rules were not observed. As an example, a mother reported that in the course of one of these events she touched by mistake the chain of a door and was shocked when she noticed a chain like print between the shoulder of her newly born baby.

b. Darkness - In the opinion of the respondents in the two villages (Khatir and Bala-Deh) night and its darkness is asscciated with mysterious beings and their activities. It is further believed that these beings are found in such places as ruins of deserted homes, grave yards and places where ashes are piled. Pregnant women are supposed to stay away from such places during the night as they may unknowing agitate one of them who may in turn react back by harming them in such a way that may not be curable.

In the village of Shah-Noor not a single respondent made reference to any of the events discussed above in relation to pregnant women. As far as we could tell, the nonexistence of these beliefs in this particular village can once again be explained in terms of the general pattern of life and the prevailing economic conditions. In the writers opinion the presence of such beliefs and trying to conform to the behavior expected appeared to be a luxury that the inhabitants of Shah-Noor could hardly afford. The pressing economic conditions under which they live make the active involvement of women, even if pregnant, in the work outside the house an unavoidable necessity, which can hardly be planned in a manner that will permit the women to reach home before dark.

2. Social Events:

Two events, namely participation in funeral services and a visit to the house where a baby is just born were mentioned as being useful for the pregnant woman by respondents in all three villages. While participation in these events is regarded harmful for this group yet the close social ties that characterize the life of rural people makes their avoidance socially impossible. From a closer analysis of these events as perceived by the villagers and the related set of beliefs, it becomes clear that it is not the whole situation as such that is assumed dangerous, but only certain aspects of it are thought so. This means that pregnant women can participate in both of these events provided they follow the culturally prescribed action related to the situation. The funeral ceremony demands that the women should take off the amulets if they carry any and leave them home and abstain from eating or drinking in the house of the deceased. They are also expected to seat themselves in a place where the shadow of death will not fall on them. To visit the house where a baby is born they have to avoid eating and to take off their amulets.

B. Nursing Mothers:

The respondents in the villages observed by the study considered breast feeding of the baby as a must as part of the mother's role. Moreover they all thought that what she eats will affect her milk, and eventually the baby whom she nurses, which induces mothers to take the food restriction rules more seriously than is the case with those related to pregnant women.

The response given to the questions aimed at revealing the nature of the beliefs that dictated what the nursing mothers can and cannot eat showed that two more elements, namely the concern for the taste of the mother's milk and her recovery are added to the list of problems related to one or another aspect of the mother's child's health that were used as criteria to decide what the pregnant woman should eat. This means that lactating mothers are not only expected to conform closely to the rule but are at the same time to conform to a greater number of such restrictions.

A hard and critical look at the data gathered in the field brought to the investigators attention an important aspect of the nursing stage, which in the investigator's opinion, if not taken account, can lead the observer to come up with an unrealistic picture of food specific prohibitions. Information at our disposal helped us realize that food avoidances do not remain unchanged through the course of nursing time, but changes and diminishes in number as the child advances in age. As a result of such an observation it is proposed that the nursing stages should not be treated as a unified unit of time but rather divided into sub-units each characterized by its own set of food restricting rules.

Taking into account the differential distribution of these rules along the nursing interval it was possible to divide it into the following three distinct sub-stages:

1. From the time of birth - 40 days

2. From 40 days - 5 months

3. Five months - weaning

Within the first sub-stage, that is from the time of delivery up to 40 days, the mothers are forbidden to drink unboiled water simply because it is thought to intensify internal pains and for the fact that it delays the mother's recovery. Citrus fruits were avoided for the same reason. Meats of all kinds except mutton (male) and young chicken were held to be harmful for the lactating mother. The reasons given were that they are hard to digest, lead to pains and swelling of the joints and makes the baby's stomach ache. Among the dairy products, milk was associated with excessive gas formation in the stomach which means pain while whey and yogurt were assumed to postpone the mother's recovery. A number

of vegetables such as potatoes, turnips and carrots were known as hard to digest foods and as such should be avoided. Raw onions, house leeks and hot peppers were known to change the flavor and the taste of the mother's milk in a way that the babies do not want to drink it and causes stomach aches, and leads to skin burning and irritation.

At the close of this period which is the 40th day after delivery, the mother is no more regarded as unclean or as a patient. This means that those foods which were avoided for no other reason but her own health need not be observed any longer. The "do not touch" sign is removed from the sun-boiled water and citrus fruits. The same holds true for dairy products and meats that are well cooked. The only restrictions that still remain in force are the ones that are supposed to maintain the normal taste and flavor of the mother's milk and the ones that are intended to prevent skin irritation and burning.

By the age of approximately five months, at which time the mothers start to supplement their own milk by feeding their children a little bread with sweetened tea or milk, if available, no food item was mentioned as being avoided by nursing mothers.

1. Duration of Nursing Time:

The data related to the stages of nursing and the duration in particular pointed to two important tendencies; that is (1) mothers tended to nurse their babies for a reasonably sufficient length of time, and (2) the upper limit of the nursing time is to some extent subject to the sex of the child.

Table VI: Percentage Distribution of Mothers in Regard to the Age of Weaning for Boys and Girls

Age in Years	Bala-Deh Village		Shah-Noor Village		Khatir Village	
	Boys %	Girls%	Boys %	Girls %	Boys %	Girls %
1-1½	20	20	0	8	56	56
1½-2	30	5	58	45	33	16
2 and over	50	75	42	47	11	28

In the three villages no evidence was found that could be taken as a sign of willingness on the part of the mothers to wean their babies before the age of one year. In fact, all of those interviewed regarded one year as the lower permissive limit of the nursing interval. As to what should be the upper limit of the nursing time, the responses differed quite a great deal from village to the next. As Table VI indicates, 20% of the mothers in Bala-Deh and 8% of those in the village of Shah-Noor breast-feed their children for 1-1½ years. In the village

of Khatir, however, quite a different situation was encountered. Here 56% of the informants mentioned that they nurse their babies for the length of time stated above.

Looking at the other end of the nursing time, that is its extension beyond $1\frac{1}{2}$ years, a complete reversal in the attitudes of the mothers was observed. In this connection 80% of the respondents in Bala-Deh and over 90% of them in Shan-Noor stated that they continued to breast feed their babies longer than $1\frac{1}{2}$ years. While only 44% of those in Khatir nursed their babies for so long.

From the comparison of these percentages, the conclusion was reached that mothers in the two villages designated as most rural (Bala-Deh and Shah-Noor) were far more permissive in their attitudes concerning the length of nursing time than those of the village of Khatir. In this village, among the respondents, a great deal of desire was sensed to imitate the ideas and the practices that originate from the city. The nursing time restricting attitude on the part of the mothers in our opinion can be explained in terms of the urban influence.

The difference in attitudes concerning the relationship between the upper limit of the nursing time and the sex of the baby was in the direction opposite to which is commonly assumed and even what the investigator had expected. As Table VI indicates, mothers in all three villages on the average tended to allow girl babies a longer period of nursing time than boys. 75% of the mothers in Bala-Deh breast feed their daughters for more than two years while 50% claimed to nurse their sons for so long. In Khatir and Shah-Noor, the number of mothers who tend to nurse their daughters and sons for such a length of time were 11%, 80% and 42%, 47% respectively.

Such a female favoring attitude was expressed by our respondents in the three villages should in no way be interpreted as signs of a higher status compared to boys. Through further discussions, it was learned that the stated attitude is nothing but an overt expression of a feeling that regards females less privileged in comparison to the boys, because they have to leave their parental home when married. The longer permitted nursing time, in the girls case, is to compensate for such a loss.

If such a female supportive tendency on the part of the mothers cannot be taken as proof of her higher status, it can certainly be used as a basis of argument for rejecting the still widely held belief that places the girls always second to the boys, or better, the first to be told and the last to be served. Moreover, if the evidence were not strong enough on the basis which the investigator could claim that such a female favoring attitude would continue beyond the nursing stage. At the same time there was no reason to assume that the situation would reverse itself in favor of the boys.

2. Weaning Practices:

Along with the beliefs dealing with the aspect of weaning a number of practices and techniques were found that were related to the "how" aspect of it as well. Through a close look at these practices the investigator was able to realize that they were all based on two concepts, namely fear and reward.

As a first step in the process of weaning, the mother applies or places one of the several widely used fear generating items such as wool, hair, hot pepper, etc. to the tip of her nipple immediately before the baby asks for milk. Just by a look at the unfamiliar, yet frightening sight of the mother or the touch of mouth the baby unwillingly turns away crying. The mother who expects such a reaction from the child rewards him for so doing by offering such things as sweets, cookies, eggs and so forth to keep the baby from crying and at the same time to divert his attention from the breast. This act is repeated any time the child asks for milk. The respondents in the three villages stated that the consistent repetition of this procedure was an effective way of weaning and on the average ten days were considered adequate time for it.

C. Post Weaning Stage:

Contrary to what has been expected, no evidence was found in any of the three villages that would point to the presence of any beliefs and rules that would prohibit the baby from eating certain food items. This finding, while interesting in itself, was not accepted to be a complete answer to the question of what the baby really gets to eat. Accepting the assertion that the best way to a child's stomach is through his mother's mind as a valid statement, the investigators concluded that the intended and the culturally approved food restricting rules were only one aspect of the mother's way of thinking. What the investigator wished to find out was if there were other attitudes on her part that may unintentionally act as a mechanism of depriving the child of what he should be eating.

A number of questions were devised that were used as a means to help reach this end. For instance the respondents were asked the following questions. Do you prepare or have you prepared any special dish for your child? If so, at what age? For how long? Why did you do so?

Responses to these questions indicated that mothers in these villages, as a custom, prepared special dishes for their children but as their answers indicated only when the baby was being weaned or until the baby was completely off the breast which as the data indicated in no case lasted longer than a month. Moreover as noted earlier, what the mothers feed their children during this time were foods that were meant to keep them from crying on the one hand and to fill their stomachs on the other. In the light of this information the investigators claim the non-existence of any information in relation to the nutritional needs of the growing child.

To take a step further and to penetrate deeper into the mother's way of thinking and believing as related to the nutrition of the child, the respondents were asked "Do you or had you any schedule that will regulate the eating, playing and sleeping of your child?" The responses given in this relation showed clearly that parents, particularly mothers were over-protective and over-attentive in times when the child was in some kind of trouble. Other than this, the child was left to its own and to do what interested the child.

In playing the child was engaged almost all of the day. When the child feels the sense of hunger, he runs home and gets a piece of bread (this was observed on many offcasions in the three villages) and then runs back to play. He eats while he plays and plays when he eats. As a result by the time for meals, the child is either too tired to be awake or too full of bread to ask for anything else.

In the investigator's opinion the two enemies that threatened the child's nutritional status at the post-weaning stage in the three villages were the lack of any knowledge pertaining to the child's nutritional status, and the "leave them alone" attitude as long as they are out of the way of the busy mothers. These two forces acting together lead to an unintended deprivation of the child from almost all that is available from the family but bread which he eats more than his due share.

CONCLUSIONS:

The data obtained in the field and the observations in the three villages tell us that these people are subject to severe economic strains and stresses. The feeling of being deprived because of scarcity of resources was widely spread among them, but the case of the child is far more critical than one can guess. The child is subject to a number of forces, some easily perceived even by "casual observation" while others are of a far more complicated nature. It is these forces that deprive the child of what little is available in the depriving situation.

The social values and beliefs that prohibit the child or his mother from eating certain food items, while important, are not as alarming as one would claim them to be. As described earlier, they are observed when the child depends on a sure source of his nourishment - his mother's milk. His well-being as far as nutrition is concerned is in real jeopardy after weaning. The investigator stresses the child's case at this particular age, because the mechanisms that deprive the little one of what he urgently needs are not intended social restrictions, but the unintended, unrealized and not mentioned attitudes that may escape even the attention of those mothers actively concerned with their welfare.

In the investigator's opinion, as a result of this investigation, no plan or side regardless of content or intention will prove of much help for the child unless and until serious attempts are being made to bring these attitudes to the conscious level of the parents, particularly mothers, and help them become aware of the damage

they are causing. The investigator is convinced that the best way to a child's stomach is through the mother's mind, and because of it, advocates without any reservation that any services for children particularly those in rural areas, must be delivered through the human machine, that is the mother's mind.

DRAFT BHS - ANNEX 6

ORIGIN CODE	STAFFING PATTERN ACTION REQUEST	INSTRUCTION Type or print all entries clearly.
PIC KEYED	REQUESTING OFFICE, BUREAU, OR MISSION: USAID/Afghanistan	SPAR NUMBER

PER 01 — I. ORGANIZATIONAL HEADER

A. ORGNO	(9)	
B. Parent ORGNO	(9)	
C. Organizational Title	(50)	
D. Organizational Abbrev.	(15)	

PER 02 — II. POSITION DATA

A. TYPE OF ACTION *(Enter underlined letter in box)*

☐ ESTABLISH ☐ REVISE ☐ CORRECT ☐ DELETE

B. CODES		
1. POSNO	(9)	233067015
2. Post Code	(2)	01
3. Position Status	(1)	D
4. Type of Position	(4)	AGKM
5. Allotment	(19)	
6. Cost Code	(4)	
7. Utility Code	(2)	
8. Project Number	(11)	
9. AOS Code	(6)	0685.05
10. Func. Class S&E	(2)	
11. Pay Plan	(2)	FR
12. Pay Grade/Class	(2)	03
13. Supervisory Psn.	(1)	N
14. 1st. Language Req.	(4)	1110
15. 2nd. Language Req.	(4)	
16. PASA Agency	(2)	
17. Psn. Descr. No.	(5)	
18. Psn. Indicator	(1)	
19. Competitive Level	(3)	
20. Date Last Audited	(6)	

C. PROPOSED POSITION TITLE AND BACKSTOP

Public Health Advisor BS 50
(BHS Project Advisor)

D. LEVEL OF TECHNICAL PROGRAM FOR WHICH RESPONSIBLE

☐ MULTI-COUNTRY ☐ NAT'L ☐ AREA ☐ VIL-LAGE ☐ OTHER

E. SUPERVISOR'S TITLE AND GRADE

Population Officer-Public Health, FSR-02

F. SUPERVISION EXERCISED *(Type of supervision, number, type, and class level of employees)*

Supervises one Afghan Professional assistant whose title is: Assistant Project Advisor for Basic Health Services project. Assists with supervision three secretarial, clerical staff members.

G. PUBLISHED OCCUPATIONAL STANDARDS DESCRIBE POSITION

☐ FULLY ☐ PARTIALLY

PER 03 — III. RESEQUENCE

A. FROM ORGNO/POSNO	B. TO ORGNO/POSNO

REMARKS *(Use plain bond if more space is needed)*

SPAR to establish new position (Public Health Advisor- B.S. 50)
(BHS Project Advisor)

Clearances on original

PERS:CSGregory
ADM:HBrown
CO:McLarney
ADDP:RARogers
DD:FHSligh
H/FP:CRCurney

Approved By:
Vincent W. Brown
Director

IV. EMPLOYEE DATA

A. NAME *(Last, First, Middle - Use Caps)*	B. BIRTH DATE	C. SOCIAL SECURITY NUMBER

V. AID/W - SER/PM USE ONLY

A. NATURE OF ACTION CODE	B. EFFECTIVE DATE	C. CIVIL SERVICE OR OTHER LEGAL AUTHORITY

VI. CLEARANCES

EMPLOYING OFFICE	DATE	PM/CSP PLACEMENT	DATE

VII. APPROVALS

POSITION - SER/PM CLASSIFICATION	DATE	ORGANIZATION - SER/MP	DATE

AID 4-512 (4-/3) Originator Copy

170

USAID/Afghanistan
SPAR NO:
Title : Public Health Advisor
Code :
Grade : FSR-3

Reports to:
Health/Family Planning Division Chief
Grade : FSR-2

General Description

The Public Health Advisor is primarily responsible for advising and assisting the Ministry of Public Health (MOPH) in the implementation of the Basic Health Services (BHS) Phase I project. The Advisor is responsible to the Chief of the Health/Family Planning (H/FP) Division, USAID/A, and to counterpart officials of the MOPH.

Representative Duties

1. Advises the MOPH on the implementation of the BHS project. Assists the MOPH and the Project Officer in periodic evaluations and assists in project redesign if necessary.

2. Advises the MOPH on finance, budget, and program considerations necessary for MOPH support of the BHS project.

3. Maintains liaison with counterparts and the Project Officer and USAID to determine required commodity support, participant training, and other matters of mutual interest in support of the project.

4. Advises the MOPH and assists the MOPH in coordinating the Fixed Amount Reimbursements (FAR) with USAID.

5. Assists in coordination with other donors on matters relating to the health sector and specifically on those regarding contributions to the BHS project.

6. Assists and advises MOPH in reviewing procedures to insure adequate controls and reporting procedures to insure timely project implementation and early identification of problems.

Qualifications

1. Should have at least an undergraduate degree and preferably a graduate degree in Public Health or related field. Experience as an advisor or project manager in a similar program would be very helpful. Excellent health and ability to work at high altitude up to 3,500 meters. Project sites may have to be reached by foot, horse or donkey in remote areas. Proven ability to acquire new languages would be very helpful.

2. Amont otherwise equally qualified candidates, preference should be given to a person who: (a) has, at any time in his/her career, obtained practical experience in construction, engineering or related work; (b) has had experience in technical assistance programs in a Moslem society; and (c) has acquired some competence in the Dari (Persian) language.

Environmental Impact

The Basic Health Services project is intended to have direct, positive effects on the environment. The long-term project goal assumes an increasing utilization of basic medical services and application of nutrition and hygiene information provided through the vastly expanded health system.

For the goal to be achieved will require improvement of the immediate environment of the people, including an increase of pure water supplies, improvements in waste disposal, control of infectious diseases and improvements in dietary habits.

In Phase I 50 buildings will be completed in order to provide the skeletal network from which health services will reach the population. The construction of the buildings and their care and maintenance place no demands on scarce resources. The buildings will be designed by engineers; the construction will be monitored to insure adherence to specifications. These buildings will provide for villagers models of sound construction, serving thereby as examples to be followed.

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