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YEMEN BASIC HEALTH SERVICES PROJECT (2006-2010)

FINAL REPORT

MARCH 2011



PATHFINDER INTERNATIONAL

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Associate Cooperative Agreement No. 279-A-00-06-00004-00

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Introduction: project contractual information

The Basic Health Services Project (BHS) is a USAID Yemen project implemented through an Associate Cooperative Agreement No. 279-A-00-06-00004-00 awarded to Pathfinder International through “Extending Service Delivery for Reproductive Health and Family Planning Project (ESD) Leader with Associate Award Cooperative Agreement Award number GPO-A-00-05-00027-00. The award dates are December 14, 2006 to December 13, 2008, and the end date was amended to December 13, 2010 by MAARD number 8 issued December 2nd 2008.

Project funds (LOP amount): \$15,000,000 (2006-2008) increased to \$25,000,000 with a two year extension (2009-2010) as per Mod #8, dated December 2nd 2008; then reduced by Mod # 13, dated March 31st 2010 to 21,610,314.78. The full amount was obligated.

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Implementing agency: Pathfinder International is a US based NGO, founded in 1957 to help women and families have access to contraception and to quality reproductive health care. Pathfinder has worked in Yemen since the early 80’s to introduce and support Family Planning services. Contact person: Caroline Crosbie, senior VP, Programs.

Pathfinder is currently registered as an international NGO in Yemen. Contact person: Dr Yahia Al Babily, Yemen Country Representative.

Associate Award Leader: The Extending Service Delivery Project (ESD) is a USAID global project for family planning and reproductive health, operating from Washington DC and implemented by a consortium of agencies led by Pathfinder International. Contact person: Linda Casey, Director

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Abbreviations and acronyms

AMTSL	Active Management of Third Stage of Labor
ANC	Antenatal Care
BCC	Behavior Change Communication
BHS	Basic Health Services (project)
BP	Best Practice
CBO	Community Based Organization
CHW	Community Health Worker
C-IMCI	Community Integrated Management of Childhood Illness
CMG	Community Mobilization Group
CMW	Community Midwife
CPR	Contraceptive Prevalence Rate
CTO	Cognizant Technical Officer
DFID	Department for International Development
DG	Director General
DGH	Director General of Health (governorate)
DHS	Demographic and Health Survey
ECG	Electro Cardiogram
EmOC	Emergency Obstetric Care
EmNOC	Emergency Obstetric and Neonatal Care
ESD	Extending Service Delivery (project)
FHS	Family Health Survey
FP	Family Planning
GAVI	Global Alliance for Vaccines and Immunizations
GTZ	German Technical Cooperation
HC	Health Center
HIHS	High Institute of Health Sciences
HSS	Health Systems Support
HTSP	Healthy Timing and Spacing of Pregnancy
IC	Improvement Collaborative
IEC	Information, Education, Communication
IMCI	Integrated Management of Childhood Illness
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
IR	Intermediate Result
IUD	Intra Uterine Device
KMC	Kangaroo Mother Care
KAP	Knowledge, Attitude and Practice
LAM	Lactational Amenorrhea Method
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MDG	Millennium Development Goal
MMR	Maternal Mortality Rate
MNCH	Maternal Neonatal and Child Health
MNH	Maternal and Neonatal Health
MOPHP	Ministry of Public Health and Population

MVA	Manual Vacuum Aspiration
NGO	Non-Governmental Organization
NPC	National Population Council
NSMA	National Safe Motherhood Alliance
PPH	Postpartum Hemorrhage
PMP	Performance Monitoring Plan
PHC	Primary Health Care
PI	Pathfinder International
PMC	Postpartum Care
PNC	Postnatal Care
PPM	Private Practice Midwives
QR	Quarterly Report
RCS	Red Crescent Society (Yemeni)
RH	Reproductive Health
RHTG	Reproductive Health Technical Group
RL	Religious Leader
ROYG	Republic of Yemen Government
SO	Strategic Objective
SOW	Statement of Work
TA	Technical Assistance
SFD	Social Fund for Development
SGF	Social Guidance Foundation (Yemeni)
TFR	Total Fertility Rate
TOT	Training of Trainer
WHO	World Health Organization
YFCA	Yemen Family Care Association
YMA	Yemeni Midwives Association
YWU	Yemeni Women's Union
YPHA	Yemeni Public Health Association
YPHR	Yemen Partnership for Health Reform (project)

Changes in the Yemen country situation during the life of the BHS project (2006-2010)

Pathfinder International built upon the knowledge and experience gathered during the Catalyst project which it had implemented in Yemen in 2004-2005 and which was in large part the basis for the Basic Health Services Project. In the assessments conducted in 2004 and again in 2006, Pathfinder focused on gathering information on the ground in the five target governorates and used available information from various sources to complete the analysis. Most information that was available at the time was of general nature and not specific to the target governorates. The Family Health Survey (FHS) of 2003 was the major source of reference at the time despite various criticism and apparent shortcomings. Its findings also reflected the situation in the target governorates although almost every issue revealed in the FHS was more acutely present in the target governorates than elsewhere as shown in the table below where national averages from the national Family Health Survey (FHS 2003) are compared with averages from the Knowledge Attitudes and Practices (KAP) Survey conducted by BHS as a baseline for the project.

Percent of women in the study who:	National Average (FHS 2003)	Target governorates (KAP 2005)
Know danger signs in pregnancy and childbirth	n/a	37%
Received prenatal care from doctor or midwife	45%	41.6%
Delivered her last child at home	77.2%	90.4%
Used a professional birth attendant at home	3.7%	0%
Received some postpartum care	12.8%	9.6%
Completed their children vaccination cycle	37.2%	34%
Know about modern contraceptives	72.1%	46.9
Ever used modern contraceptives	13.4%	11.4
Want to stop having children	38.6%	21.6
Want to space their pregnancies in the future	41%	n/a
Want to use contraceptives in the future	28.9%	n/a

There was no information on key health indicators that was specific to the target governorates, such as for maternal mortality and morbidity, child mortality, fertility rates, use of contraceptives etc. It can be assumed from the general knowledge about the target governorates lower economic status that they would fare worse than the rest of Yemen on most of the key indicators.

The population of Yemen is largely rural (75%), with people seemingly preferring to live in relative isolation, resulting in a huge number of villages (40793 in 2004 census) and twice as many smaller subgroups (88,000 Mahal) and with no accessible roads to link them to points of service at district or governorate levels. At best there would be asphalted roads linking the main seats of districts to the governorate center but beyond that, the villages are isolated, many are quite inaccessible, a normal journey of just a few miles will take hours and transporting a person

in need of medical attention such as a woman in labor is often considered too costly and difficult. Government authorities always faced a serious challenge in providing services. In many of the villages that the BHS team visited, the people said they have never been visited by government representatives from outside the village. In general, just 40% of the total population in Yemen has access to public sector health facilities. Only 58% have access to any health services, public or private. In rural areas, this percentage drops to 20%, which is likely where the USAID target governorates stood in 2005. Due to social and cultural restrictions, women's access is even lower. Most observers agree that this low access is not simply due to lack of health facilities as their number is relatively high. According to the 2008 Health Statistics Handbook there were 3844 public health facilities, including 2774 health units, 722 health centers, 182 district hospitals, 55 hospitals, 41 health centers with beds, 49 MCH centers and 24 polyclinics. Health facilities are generally under-equipped, understaffed, suffer from persistent drug shortages, have completely inadequate funding for their running costs and day to day needs, their management is generally shared between the local council and the district health office but more often that not the person appointed to manage the facility is appointed locally and has limited health management training. There is general agreement that the growth health facilities is chaotic and resources used for it could be better used for improving the existing ones, but local pressures to make clinics and other social services available in every village cannot be easily ignored.

There were 547 health facilities in the target governorates in 2005 including 37 rural hospitals 95 health centers, 12 hospitals and 403 health units. Development Partners in other governorates often opted to select one or two districts where they would concentrate their resources and efforts. Pathfinder, in consultation with USAID and the MOPHP did not make this decision upfront and gave the latitude to local authorities to define where the priorities lay, which interventions would be limited to selected health facilities and which others would be generalized to all health facilities, all subject to available funding. The final choices in general were to focus on improving one main health center in each district and to serve the more remote areas and their health units through mobile services. Pathfinder also tackled the issue of lack of female providers by investing in pre service training of community midwives.

Over 40% of the people live below the poverty line, and half are under 15 years of age. The failure of the Yemen government to provide services in the targeted governorates made these governorates more prone to lawlessness, tribal unrests and subversive acts against the central government and against representatives of the international community, often used just as leverage against the government. The USG rationale for focusing some of its assistance through USAID in these governorates takes all these factors into consideration as well as being based on the Yemeni government request to support its development efforts in these governorates. The BHS strategy was to support the GOY in improving access to health services in these governorates and Pathfinder project interventions were all planned and implemented with the local government authorities and local communities so that the role of the government as a provider was visible.

Data on target governorates (2005-2009)

The population in Yemen has been increasing at a rate of 3% every year, that means that during the life of the project, the target population in the 5 governorates grew by almost half a million people, the equivalent of having added another governorate the size of the Shabwa population and another 50,000 women in reproductive age to serve, which is more than half the number of all current users of family planning in the five governorates.

The tables below provide details of how the governorates main health characteristics evolved during the life of the project.

Description		Amran	Marib	Shabwa	Jawf	Saada	Totals
Population	2005	892049	241994	478167	449302	705113	2766625
	2010	1054555	280010	552691	518245	815577	3221078
	Increase	162506	38016	74524	68943	110464	454453
W. Rep Age	2005	107898	32157	59789	80649	108518	389013
	2010	127555	37209	69108	93025	111311	438208
	Increase	19656	5051	9318	12375	2792	49194
Districts		20	14	17	12	15	78
Hospitals (Gov+district)	2005	8	14	15	2	10	58
	2010	16	14	15	2	10	47
Health centers	2005	30	15	19	16	15	88
	2010	30	14	19	19	19	101
Health Units	2005	38	84	120	64	89	513
	2010	173	68	128	72	101	542
Facilities providing RH/FP services	2005	0	0	8	2	0	10
	2008	178	63	21	18	55	335
	2009	142	55	26	26	58	307
	2010	153	45	21	22	48	289

Table 1: Target Population and target areas characteristics

Since 2008, the MOPH (population sector) started using the number of health facilities providing RH/FP services as one of their key indicators and collected data on it as shown in the table. For 2005-2007, the information is based on BHS own assessments in the governorate. The numbers decreased largely because of lack of availability of qualified providers (midwives) as well as closures of health facilities in some governorates due to war, security or other factors. However, the numbers of facilities where family planning services (counseling and contraceptives) were provided directly as a result of the BHS project interventions have increased during the BHS tenure because of the deployment of the Mobile Medical Teams, the refurbishments, pre service training and placement of new midwives, the deployment of private midwives clinics and the introduction of Best Practices that include postpartum and post abortion provision of FP counseling and services. The figures in the following table include health facilities where FP services are being provided as a result of BHS interventions.

Year	Number
2005	75
2006	84
2007	216
2008	335
2009	341
2010	423

Table 2: Numbers of Health Facilities providing FP services

RH and FP services received at these facilities as shown in the following table increased in most categories including family planning services.

Description		Amran	Marib	Shabwa	Jawf	Saada	Totals
FP users (cont)	2006	18559	5959	3024	682	13185	41409
	2010	37574	8242	4372	1639	16676	68503
FP users (new)	2006	5672	4756	849	556	3490	15323
	2010	10951	5294	1676	2168	4781	22860
Deliveries in health facilities	2006	2235	1002	2751	251	4996	11235
	2010	4908	1032	2826	894	4716	12376
Home based assisted deliveries	2005	1084	2450	708	512	931	5685
	2010	5088	1383	1801	489	834	9595
Prenatal care first visits	2007	6785	843	1496	695	3694	13513
	2010	17345	6749	3366	2096	6513	34059

Table 3: Progress of reproductive health and family planning services utilization, 2006-2010.

For several years the official rate of maternal mortality cited by the MOPHP stood at 366 women's deaths per 100,000 live births as a national average, the total fertility rate was listed as 6.1 and the crude birth rate 39.2. The current infant mortality rate is 75/1,000 live births with 102 as the under-five mortality rate. The low-birth weight rate, 32%, is the highest in the world

There are no accurate statistics for maternal and child mortality and morbidity rates in the target governorates are not known but it is safe to assume that they are higher than the national averages due to the acute shortage of services available to women in these governorates for emergency obstetric and neonatal care.

- Only 19% of women in the lower quintile versus 40% in the highest quintile have sought to deliver their baby in a health care facility care (PAPCHILD, Arab League 1997 and Household budget survey 2005-2006)
- Only 36 percent of births in 2006 were delivered by skilled health personnel; ranging from 26 percent in rural areas to 62 percent in urban areas.
- Just under a quarter of births (24 percent) were delivered in a health facility.
- Socioeconomic status is positively correlated with the likelihood of giving birth in a health facility; only 9 percent of pregnant women from the poorest households delivered

in a health facility compared to 51 percent of pregnant women from the richest households.

Until 2005, Amran, the largest governorate in the USAID targeted areas with nearly a million inhabitants did not have an emergency obstetric care unit and referred women to Saada or Sanaa for C sections; it also did not have a single incubator unit for premature infants until 2005 when USAID Catalyst health project (the precursor to BHS) introduced this service. Before that, premature babies were taken by their parents to Sanaa when possible and often died on the way. Shabwa and Marib each had one comprehensive service for EmNOC in 2005 but needed more and had no neonatal incubators at all.

From 2006 to 2010, BHS added a total of 6 comprehensive emergency obstetric services in Amran (1), Marib (1), Saada (1), Shabwa (2) and Sanaa (1) and continued to support facilities added in 2005-2006 through USAID Catalyst project in Amran (1), Marib (1), and Shabwa (1). It also made basic EmOC care services (normal delivery) available in 17 more health centers by making modifications to existing clinics (10 cases) and providing the equipment needed for existing normal delivery units in health centers (total of . In addition, a number of private midwives clinics were created (12 in 2009 and 56 in 2010) to provide normal deliveries in their private clinics. So BHS has added at least 91 health sites where women can have a delivery assisted by skilled personnel. Furthermore there were 344 new midwives added through the pre-service training supported by BHS which more than doubled the availability of this cadre of skilled birth attendants in the target governorates. Other donors and the MOPHP have also added more to these numbers. The rate of skilled attended deliveries has been low throughout Yemen and progress has been slow largely because of access to comprehensive obstetric care is still confined to just a few hospitals while the rest of the hospitals as well as the primary health care centers which are normally expected to provide essential obstetric care (normal deliveries) tended to avoid providing it due to fear of complications and lack of referral ability or systems. This was the case in Sanaa city where BHS started working in 2009 to help at least five primary health care facilities (Al Olofi, Azal, Beni Hwath, Al Saleh and Al Zubeiri) begin providing normal deliveries and to set up a referral system linking these HCs to the three major hospitals (Al Sabaeen, Al Thawra and Kuweit hospitals) where comprehensive care was available. As a result of the BHS intervention, these HC started in 2010 for the first time to have 24 hour services, to provide normal deliveries and to have proper referral and working linkages with referral hospitals which also provided them with specialized personnel to staff the delivery rooms.

BHS also introduced neonatal care units in the same periods bringing this service for the first time to all the target governorates (except Al Jawf which remained until now without any EmNOC services).

Health facilities have increased somewhat between 2005 and 2010 as the MOPHP and Local Councils added infrastructure and created further pressure on the system to provide staff and equipment although the existing system was already suffering from severe shortages in all areas.

BHS monitored the staffing of health facilities especially those where it had interventions and those ones where newly graduated midwives would be placed after they complete their pre service training. The staff numbers maintained by the MOPHP are highly unreliable and a significant proportion of the personnel listed as medical and nursing staff in each of the governorates are largely non-existent especially in a governorate such as Al Jawf where this practice (ghost workers) is very common. The shortage of specialists as well as generalists is widespread. In 2010 there were no specialist or any physician in the public health facilities throughout Al Jawf; Amran had no RH specialists in any of its clinics and waited in vain from 2007 until 2010 for medical specialists to be recruited by the MOPHP to staff a comprehensive emergency obstetric care unit in Al Gafla that was established since 2007 by the Catalyst project. However, in the area of midwifery the situation has considerably improved and the BHS project can be credited for most of the midwives listed in the 2010 totals as it trained 344 new midwives between 2007 and 2010.

Health personnel		Amran	Marib	Shabwa	Jawf	Saada	Totals
Nurses	2005	272	153	607	176	132	1340
	2010	384	330	652	58	165	1589
Midwives	2005	116	43	0	0	3	162
	2010	228	112	106	64	79	589
Med assistant	2005	45	32	112	0	16	205
	2010	106	98	141	47	113	505
Physicians (specialists)	2005	13	9	15	2	6	45
	2010	15	8	13	3	5	44
Physicians	2005	49	8	13	23	35	128
	2010	172	36	117	36	43	404

Table 4: Staffing progress in the USAID target areas

Child health indicators were monitored by BHS as required for USAID reporting and the interventions completed by BHS (refurbishments, training, mobile services) contributed to the results.

Immunization beneficiaries		Amran	Marib	Shabwa	Jawf	Saada	Totals
Children under 1 (Penta)	2008	30841 (88%)	5960 (70%)	16298 (84%)	12914 (75%)	16613 (77%)	
	2009	31483 (86.7%)	6247 (78%)	15444 (84.4%)	18199 (102.4%)	11343 (50.6%)	
Children under	2008	18391	3940	9718	13198	11266	

1 receiving Vit A		(53%)	(51%)	(50%)	(76%)	(52%)	
	2009	19558 (53.9%)	3730 (46.6%)	10094 (55.2%)	1865 (10.5%)	6368 (28.4%)	
Children over 1 yr	2008	14068 (40%)	1506 (19%)	4406 (23%)	2859 (17%)	4100 (19%)	
	2009	15728 (43%)	2087 (26%)	5429 (30%)	9690 (55%)	2461 (11%)	
Children over 1 receiving Vit A	2008	10890 (31%)	1749 (22%)	3827 (20%)	6328 (37%)	5327 (25%)	
	2009	1294 (36%)	2353 (29%)	4844 (26%)	1937 (11%)	2757 (12%)	

Table 5: Immunization results, 2008-2009

Since 2007, the MOPHP statistics department started computing the Couple's Years of Protection (CYP) from its reports on distributed quantities of contraceptives. The last data available show a strong progression in 2008 compared to 2007 for each governorate targeted by BHS. Because of the unreliability of the information, perhaps the lack of complete information for the start up year, it should not be assumed that these percentages accurately reflect the increase in actual use of contraceptive; they at least indicate a strong increase in the availability of those contraceptives distributed by the MOPHP. Coupled with the results in earlier table (#3) about number of users, this provides a picture of rising family planning services utilization.

CYP	2007	2,008	% Increase
Amran	5,038	23,554	467.5%
Marib	1,985	9,413	474.2%
Al Jawf	248	2,569	1035.8%
Sa'ada	2,561	8,132	317.5%
Shabwa	988	2,886	290%
Sana'a	41,672	76,502	183.6%
Totals	52,492	123,056	234.4%

Table 6: CYP results 2007-2008 (2009-2010 not available)

The Yemen Multiple Indicator Cluster Survey was conducted in 2006 and its report issued two years later to provide information on child mortality, nutrition, child health, child protection, water and sanitation, education, fertility, reproductive health, and knowledge of HIV and AIDS is included. Some of its findings that are relevant to BHS activities and mandate are listed below.

Fertility and contraception

- The total fertility rate for Yemen was estimated at 5.2 births per woman (MICS 2006)
- Fertility rates are higher in rural areas than urban areas; the TFR in rural areas is 6 births per woman, while the TFR in urban areas is 4. The age specific fertility rates for women age 15-19 in rural areas is 56 percent higher than for women of the same age in urban areas.

- Current use of contraception was reported by 28 percent of currently married Yemeni women; with 19% of currently married women using modern methods of contraception. The most popular method is the pill which is used by 9 percent of married women in Yemen.
- Contraceptive prevalence in urban areas was double the prevalence found in rural areas.
- The percentage of women using any method of contraception rises from 23 percent among those with no education to 34 percent among women with basic education, and to 42 percent among women with secondary or higher education.
- Just under a quarter of currently married women in Yemen report an unmet need for contraception.

Antenatal care

- Forty-seven percent of mothers who had a live birth in the two years preceding the survey received antenatal care from a doctor, nurse or trained midwife.
- Women living in urban areas are considerably more likely to receive antenatal care from skilled health personnel than their rural counterparts (68 percent versus 39 percent).
- Women are most likely to see a medical doctor for their antenatal care.

Breastfeeding

- Three out of 10 children are breastfed within one hour of being born and 65 percent of children are breastfed within one day.
- Women's educational level appears to have a positive correlation with the early initiation of breastfeeding.

Early Marriage

- 14 percent of women age 15-49 years were married by the time they were 15, the proportion increases to 52 percent by the time women are 18.
- 19 percent of Yemeni women age 15-19 are currently married. In 16 percent of these marriages the husband is ten years older than the woman.

Child Mortality

- In the five years preceding the survey infant mortality was estimated to be 69 deaths per 1,000 live births; the under-five mortality rate was estimated to be 78 deaths per 1,000 live births; Both infant and under-5 mortality rates are higher for children coming from rural areas compared to their urban counterparts; the figures for under-five mortality in rural areas is about 51 percent higher than in urban areas.

Immunization

- Thirty-eight percent of children age 12 -23 months had been fully vaccinated at the time of the survey; 18 percent of these children had received all their vaccinations before the age of one.
- Immunization against measles (part of MDGs) is less than 80% and the gap is 12 percentage points between rural and urban and 9 points between the lowest and the highest quintile in poverty levels. (WHO and UNICEF Estimates)
- More than half of Yemeni children age 12-23 months had received each of the major vaccines by the age of one: 67 percent had received BCG, 60 percent had received all three doses of polio, a further 60 percent had received the third dose of DPT and 59 percent had received the measles vaccine. A low proportion of children, just 19 percent, had received the hepatitis B vaccine before their first birthday. Around one in ten Yemeni children age 12-23 months had not received a single vaccine.

Diarrhea

- Nationally 34 percent of children under the age of five had diarrhea at some time in the two weeks before the survey.
- Almost nine out of ten of the children who had diarrhea were treated with some kind of oral rehydration therapy (ORT): 33 percent were treated with ORS (solution prepared from ORS packets) and the remainder of children were given home fluids recommended by the Ministry of Health.
- Thirteen percent of children with diarrhea did not receive any type of treatment at all.
- Home management of children with diarrhea was low with only 31 percent of mother's or caretakers reporting that their child received more fluids AND continued eating somewhat less, the same or more food.

Acute respiratory Infection (ARI)

- Thirteen percent of children under age five showed symptoms of ARI in the two weeks before the survey.
- Of the children who showed such symptoms of ARI only 38 percent received antibiotics.
- Only a fifth of mothers and caretakers of under 5 children reported that fast and difficult breathing would be cause for taking their children immediately to a health facility.
- The risk of acute respiratory illness is increased by the use of solid fuels used for cooking in Yemeni households; more than one third of households use solid fuels for cooking. Almost all of these households are in rural areas; 52 percent of rural households use solid fuels for cooking.

Water and Sanitation

- In Yemen, 59 percent of the population is using an improved source of drinking water - 74 percent in urban areas and 52 percent in rural areas.
- Slightly less than three out of every ten households has water piped directly into their dwelling.
- Only 5 percent of the household population uses an appropriate method to treat their water.
- People living in households in urban settings or where the household head has received secondary or higher education or those living in the richest households, are significantly more likely to use an appropriate water treatment method than others.
- On average for households where water is not on the premises, it takes just over one hour to go to the source of drinking water, collect the water, and then return to home. The time it takes to collect water is longer for households in rural areas but still takes 45 minutes in urban areas.
- The burden of this job in over two thirds of households falls to a female adult.
- A little over half of the Yemeni population uses a sanitary means of excreta disposal.
- The difference between households in urban and rural areas is significant; 92 percent of the population in urban areas is using a sanitary form of excreta disposal compared to just 34 percent of the population living in rural areas.
- Thirty-seven percent of the Yemeni population is using both an improved source of drinking water and a sanitary means of excreta disposal.
- The gap between the rich and poor is striking when it comes to having use of both types of improved sources; the gap ranges from 2 percent for those living in the poorest households to 77 percent for those living in the richest.

Malnutrition

- Malnutrition has not improved in the last few years; to the contrary, stunting among children has increased to 33.2 % in rural areas and 23.5 % in urban areas.

BHS Project scope of work and annual work plans

The USAID health assistance through the BHS project is to assist the Republic of Yemen Government in improving its services in the five governorates of Amran, Sa'ada, El Jawf, Marib and Shabwa and improving the environment for health in Yemen. The USAID response to the health situation in Yemen is framed in *Strategic Objective 5.0: "Increased Use of Reproductive, Maternal and Child Health Services."* The SO 5.0 results will be attained through two Intermediate Results (IRs). The BHS being an Associate Award through ESD (Extending Service Delivery) project, it benefited from technical oversight from ESD as well as from technical assistance and funds from ESD to carry out activities that are within the BHS mandate as well as within the priorities and strategies assigned to ESD.

IR I: Increased Access to Quality Health Services and Participation at the Community Level

All activities under this component were part of the initial approved work plan for the three years 2006-2008 period covering the initial Award and were implemented throughout the project except for the Best Practices component (#v below) which started in 2008 with support from USAID/Yemen and the USAID AME Bureau as a follow up to the Bangkok technical meeting organized in September 2007 by USAID. The ESD project also provided support to BHS in implementing the activities related to the YMA.

i. Renovations, equipment

- Interventions include renovations which can include adding an extension to the existing clinic especially for providing delivery services, or adding housing annex to retain health workers brought in from other regions. Refurbishment also includes procurement of medical equipment and clinic furniture.

ii. Mobile medical teams

- Mobile teams provide comprehensive services in health facilities that are understaffed, each one consists of a full equipped vehicle and a team of a doctor and 2 midwives and a driver. They follow a schedule of visits established regularly by the Health Office and monitored by it and by the BHS governorate coordinator. BHS provides funds for the vehicle fuel and maintenance and for the staff travel.

iii. Pre-service training of CMs

- Through contracts with the national Health Training Institutes both in Aden and in Sanaa, BHS provided pre service training support to hundreds of midwives selected from the target governorates and who graduated under the project to join the facilities serving their original villages.

iv. Training of health providers

- All providers in governorate clinics targeted by BHS and community workers supporting health efforts will have received training at one time or another during the life of the project.
- Areas of training are:

- **Medical:** Essential Obstetric Care, Neonatal Resuscitation, Maternal And Neonatal Best Practices, Contraceptive Technology Update, Balanced Counseling, technical updates for midwives
 - **Non medical:** Community Health Education Manual message dissemination, training of religious leaders, business practice for midwives, community mapping, community mobilization, counseling.
- v. **Scaling up BPs in MNCH/FP (ESD support)**
- With support from USAID/W through ESD and with close participation of MOPHP, governorate and district hospitals and main health centers in all governorates in Yemen would benefit from training and from various interventions to improve quality of services through the application of selected best practices.
- vi. **Support to Establish Midwives In Private Practice, with YMA (ESD support)**
- Private midwives significantly increase skilled attendance of births and BHS work plan includes establishing them in their private clinics as business owners to complement the services provided by public facilities.

IR II: Increased Health Knowledge and Improved Behaviors at the Community Level

The activities under this component are part of the initial approved work plan except for the Safe Age of Marriage activity (#3) which was added in 2009 with support from ESD. The religious leaders activity was another activity within the work plan which was part of the approved work plan and also selected by ESD to receive support from the AME Bureau funds.

- i. **Health Education and Community Mobilization**
- Activities include awareness meetings by community educators and volunteers using the community education manual, educational meetings by BHS coordinators in governorates, community meetings by community mobilization groups.
- ii. **Mobilization of religious leaders (ESD support)**
- In 4 of the 5 governorates (not in Sa'ada) and in Sana'a, BHS supported the training of religious leaders and their involvement in organizing community education events and integrate in their sermons and preaching all the health messages that are part of the community education manual mentioned earlier.
- iii. **Awareness about safe Age of Marriage; in cooperation with Yemeni Women's Union. (ESD support)**
- This Project targeted 2 districts in Amran in 2009 with meetings, open days and film projections. Then moved to 2 new districts in Amran. Educators are trained and organize events to raise awareness about social and health benefits of healthy timing of marriage no earlier than at 18 years.

1. **Linkages (other USAID programs, other USG programs, other donors, Global USAID programs- ESD)** (use text from USAID RFA pack)
2. **Partners: MOPHP, other ministries, NGOs:**

Throughout the project life, BHS worked with several NGOs:

- Yemen Family Care Association: for clinical training
- Marie Stopes International: for clinical training
- Red Crescent Society: for delivery of health services
- National Safe Motherhood Alliance: for advocacy and public awareness re safe motherhood
- Yemeni Women's Union: for awareness and advocacy about prevention of early marriage
- Charitable Society for Social Welfare: for community outreach and health education
- Yemen Midwives Association: training, support for private practice
- Yemen Public Health Association: mobilizing health professionals to reach the MDGs
- Al Saleh Foundation: community outreach and health education
- SOUL: community outreach and health education
- Social Guidance Foundation: training of religious leaders

On the national level, BHS worked primarily with the MOPHP / Population Sector as its main focal point and partner in dealing with the governorates health offices but through the MOPHP it also developed activities with other ministries:

- Ministry of Religious Endowments and Guidance: training of religious guidance preachers on disseminating health messages: currently on going activity.
- Ministry of Information: involvement of media personnel and mobilization of 14 national and regional radio stations to broadcast the 42 messages of the community health education manual throughout 2010.

At governorate levels, BHS worked with the General Director of Health in each governorate making sure that all exchanges are also coordinated with the Population Sector at the central level. Through the governorates BHS also established working relations with various ministries and organizations particularly to develop synergies for community mobilization. Community Mobilization Groups were established by a Governor's decree in each governorate upon request from BHS to conduct community outreach activities supported by BHS, with membership from Social Affairs, Youth, Agriculture, Information, Religious Endowments, Education, Health, Environment, Local Administration, the Yemen Women's Union and the Women's National Committee.

Throughout the life of the project there were two work plans one issued in 2006 at the start of the project for 2006-2008 and a second one issued in 2009 for the extension period covering 2009 and 2020. Each year however the work plan had to be resubmitted with any needed updates. In general long term targets such as renovations, procurements and pre service training were set at the start of the period and implemented for the remainder of the phase in question. On the job

training and community education activities and targets were more amenable to changes or to planning on a short term basis. The plans were laid out in detail for each governorate after a process of joint needs assessment, joint discussions and priority setting with the health offices and representatives of the governorates and districts. The implementation itself was also a joint activity closely involving the governorate health offices and also keeping the central level MOPHP informed.

As the award for BHS reached its third year, Pathfinder International requested USAID to award an extension of the project for another two years (2009-2010) coinciding with the end in December 2010 of the global ESD project through which Pathfinder International received the associate award for Yemen. ESD has provided technical support to the BHS project as well as contributed core funds to support innovations in the BHS project such as midwifery in private practice, involvement of religious leaders in family planning and reproductive health, scaling up of best practices in MNCH/FP and preventing harmful practices such as child marriage.

Through 2004-2008, USAID/BHS had focused on improving access to health care and on improving knowledge and behavior related to health issues so that people will know how to use available services in the best way to fully meet their health needs. Pathfinder proposed that the focus for 2009-10 would remain the same while making adjustments. Because of limited resources, programs had to be well targeted and prioritized and invest their resources where they are likely to produce the most results. This may be unpopular with the host country as local authorities constantly want more investments in building and infrastructure in more remote areas. Pathfinder recommended that USAID/ BHS place emphasis on improving the quality of health services in existing facilities before considering new ones. Among existing facilities BHS would particularly target those that are situated within large populated areas, and implement training and other quality improvement interventions to improve the service given by staff and the uninterrupted availability of essential commodities to the clients.

The priority in assisting governorates served by USAID/BHS was and should continue to be the improvement of the main facility in each district (called a rural hospital or MCH center) before moving to improve smaller health units. For example these facilities are responsible for more than 75% of the total family planning clients although in terms of absolute numbers or prevalence the results are still weak. Investments in these facilities are more likely to result in higher numbers of clients than investments in smaller remote facilities. Human resources are the key to this as it is highly unlikely that the MOPHP will be able in the foreseeable future to staff all its facilities adequately so the first ones to be staffed will remain those at the district seat. If these centers are improved to be of the best quality possible they will bring in higher number of clients and will also reduce the burden on larger hospitals in the governorates or in Sana'a. Full family planning services should be readily available in all such facilities in Yemen along with basic EmOC and PHC services. These are also facilities that should be functioning on a 24 hour basis.

In addition, and for remote facilities that usually have little or no qualified staff USAID/BHS has deployed mobile medical teams that operate in such facilities on a periodic basis. It has invested in pre-service training of hundreds of midwives who will come back to work in these underserved areas and has started the establishment of community based midwives as private providers working out of small clinics in their own homes or at sites provided by the community. These programs bring a measure of equity in the intervention and distribution of services as they cater to the remote, neglected and hard to reach areas that suffer the most from poverty and disease and USAID should continue to support them if possible.

In general, public confidence in health services is low, with most patients bypassing lower level facilities and seeking care at hospitals. This trend will take a long time to reverse because PHC will take a long time to fix and people's habits an even longer time to change. So the immediate opportunity is to ensure that those seeking primary care at large hospitals will indeed get good care and then be instructed (referred) to seek care at primary care facilities that are closer to them and are likely to also provide good service.

The popularity of large hospitals, although based on inappropriate care seeking behaviour, is nevertheless an opportunity to improve the care received by the public and begin building the public confidence in public services. Large hospitals can also have a positive impact on smaller health facilities through their role as training facilities and reference centres.

Programs in 2009-10 focused on supporting the MOPHP in delivering services that are known to result in improved reproductive health. Examples are:

- Increase the knowledge, acceptance and use of long term family planning methods (IUD and implants); BHS can support training of midwives in IUD insertion in application of the latest MOPHP guidelines allowing experienced community midwives to offer this service. BHS can also support the training of all medical providers in contraceptive technology including implants.
- Increase the proportion of skilled attendance during deliveries by improving the availability and quality of basic EmOC facilities, improving parents' and community readiness for pregnancy and delivery, improving referral skills among midwives and medical assistants and encouraging the adoption of evidence based best practices known to reduce maternal mortality (MTSL and control of obstetric hemorrhage) and reduce neonatal mortality.
- Improve integrated counseling and services at the facilities resulting in providing more needed services to women and children in addition to services that were the primary cause of their visit (example: provide postpartum FP during infant immunization visits)
- Continue to provide support to mobile medical teams that serve remote areas and work with MOPHP to scale up this approach as a palliative for the lack of qualified providers

in many rural health facilities, a lack that will unfortunately be with us for a long time to come.

In terms of which governorates to prioritize for assistance, Sana'a, the capital of Yemen, receives immigrants from all other areas of the country and its main health facilities serve women and children coming from all governorates for health care. Its major health facilities are referral and training centers for the rest of the country. Aden is also another pole of attraction and its health facilities serve as referral centers for the southern part of the country. Ibb, Taiz and Hodeida are among the most populated governorates and selecting one of these like Ibb would also provide opportunities to work more closely on issues such child marriage.

There are also opportunities to address unmet needs in large urban and poor areas and to begin targeting specific population segments that are more vulnerable and hard to reach. In this respect adolescents and youth aged 15 – 24 make up approximately 18% of the total population. (3.35 million) and it is anticipated that this segment of the population will double in just 20 years. The government of Yemen has articulated interest in focusing more attention on the needs of Yemen's youth through a national youth strategy approved in 2006. Most young women have limited information about reproductive health services, and are unlikely to seek services until they have had their first child. Most young women have limited decision-making power, even over their own health, including reproductive health. Thirty-six percent of women report that their husbands make their health care decisions, while another 58% make such decisions jointly.

Successful family planning is that which delivers high quality RH services to couples in the early years of marriage and before they have completed their desired family size. In family planning and reproductive health USAID seeks to support Yemeni partners in implementing successful using evidence based best practices that have proven effective in producing the desired results. In supporting change, effective programs will seek to involve all segments of the community and in particular to empower women to play an increasingly active role in society and will look for non-health sectors to also play a role in support of healthy behaviors.

Some of the 2009-10 programs that will focus on youth will seek to:

- Inform decision-makers about the negative effects of early marriage and pregnancy and seek to reduce or eliminate child marriage.
- Support RH services that pay special attention to the needs of young couples
- Support the MOPHP to develop appropriate strategies and programs for youth, including RH information and services
- Support health care providers in providing good quality RH information and services to young people, and in particular young married women and their partners, through public and private sector providers

- Provide training to health care providers, educators, community leaders, parents, partners and youth

Implementing youth-focused programs in Sanaa and Aden has a potential for the whole of the country. Given their status, the two cities are the venues of choice for starting and scaling up programs that will carry through to the rest of the country. Venues will include the universities of Sanaa and Aden and other educational institutions. Interventions will include developing services that are youth friendly within major health care institutions that are considered referral and training centers and introducing evidence based best practices in maternal, neonatal and child health care.

Finally it has become evident that international assistance that bypasses the national level to work directly with governorate and district level risks being unsustainable. Efforts should equally be spent on supporting the MOPHP improve its capacity and play its role in planning, setting and enforcing quality standards, monitoring and supervision. It is also necessary for USAID to work more closely with other development partners who are currently working closely with the MOPHP at the national level. USAID has strong capabilities to provide good TA to the ministry in support of better policies and strategies and can only do so by being involved at the central level. It is suggested that BHS would provide TA in the areas of policies and standards of care (example of introducing Best Practices in MOPHP standards, developing a referral system), training of MOPHP staff (in planning, TOT and ability to provide TA to the lower levels) , developing and strengthening supervision (setting up systems and training supervisors), monitoring and evaluation (using data to predict or identify problems and be prepared to solve them).

The following tables show the details of activities planned with each governorate and nationally for the first phase then for the second one.

The information includes a brief statement on whether the planned action was completed and as needed, the year in which it was completed. There are additional sections in the report where the details of each activity are provided and discussed.

Planned activities for each governorate and district and their status by the end of the planning period. Activities that are common to all districts are mentioned once as part of the “whole governorate” activities.

AMRAN Districts / facilities	Activities Planned in 2006-2008	Status at end of 2008	Activities planned 2009-2010	Status at end of 2010
Harf Sofian - District Rural Hospital	Follow up on use of normal delivery section / and counseling room, 5 midwives in Pre service training, 5 providers trained, 1 RL trained	Done	No refurbishments planned in 09-10	
Al-Ashah-District Rural Hospital	Training. Furnish 8 units of staff housing.	Done (08)	RH Equipment	No
	General Medical Equipment	Done (07)		
	5 service providers trained, 1 religious leader	Done		
Al-Qaflah-District Rural Hospital	Training		Some EmOC equipment	Still no doctors
	OT equipment	Delivered (07)		
	Follow up on the proper utilization of the Operation Theatre: QI, Training, etc.	Op Theater still not staffed		
	Furnish 4 units of staff housing	Done 08		
Al-Madan-District Rural Hospital	Training		RH equipment	
	Build and furnish staff housing		Some EmOC equipment	
	Equipment and furniture for Normal Delivery Unit			
	Provide 5 KW generator			
Shahara-District Rural Hospital	Training	2 providers	Counseling equipment	Done 09
	Renovation of the hospital	Not done	Housing furniture	Done 09
	Addition of an EmOC unit (op. theater)	Not done	RH equipment	Done
	Lab equipment	No	Medical diagnosis package and Lab equipment	Done 010
	Furniture for health ed. & counseling room	No	Equipment and furniture for consulting room of health centers visited	Done 09

			by MT (Shahara HC, Al Hajr HC, Al Qabeel HC)	
Ial Suraih - District Health Center	Training: 3 providers		Counseling room equipment	Done 09
	New Housing + furniture		Diagnostic and IP equipment	Done 010
	New normal delivery unit and furnishing		RH and EmOC equipment	Done 010
	Equipment and furniture for HC or Units visited by MTs (Amad HU, Bin Zubir HU, Beni Qadem HU)	Done 07	Equipment and furniture for Sahab Health Center	Done 09
	1 midwives trained (Pre-service) 1 religious leader			
Maswar-District Health Center	Training : 6 trained providers 1 religious leader	Done	Counseling room equipment	Done 09
	Furniture for health ed. & counseling room	Done	RH and EmOC equipment	Not done
			Medical diagnostic equipment	Done 08-010
	Minor repairs to HC	Not done	Housing furniture 3 private midwives trained	Done 09
Khamer District General Hospital Assalam & Al-Hayzi HC	Training: 6 midwives (pre-service) and 2 on the job, 6 female religious educators		18 health educators trained (Community Health education manual)	Done 09
	Building the unfinished housing of the SP - Al-Hayzi HC	Completed	Counseling room equipment	Not done
	Follow up on the functioning of the Neonates Unit	Done	ICU equipment (Al Salam Hospital)	Done 08
	Equipment and furniture for health centers and units visited by MTs (Al Haizi HC, AlHayah HU, Qasaba HU)	Done 07		
Haboor Dholaimah-District Rural Hospital	Training: 2 pre service midwives, 6 health providers, 1 religious leader	Done		
	Housing+ furniture	Done 07	RH service equipment	No
Amran -City (family health center & red crescent center)	Training : 2 midwives in pre-service training, 1 health institute midwife trained, 21 general hospital staff trained, 3 RL males, 4 females		1 private Midwife clinic,	09
	Diagnostic medical equipment (for FHC + Red crescent center)	Done 07	Counseling room equipment	Done 09
	Furniture for health ed. & counseling room (2 units for Halamlam HU + Red crescent center)	Done 07	Equipment and furniture for health centers and units visited by MTs (, Bait El Najeeb HC, Al Jannet HU, Al Osrah HC,	Done 2010
	New Training center and Housing	Not done	Normal delivery	Done

			equipment, SCW society	010
	Follow up on the functioning of the Neonates Unit	Done regularly	Amran General Hospital:4 Neonatal incubators, ICU room equipment	Done 2010
			10 Community mobilization volunteers trained	Done 09
Thula+ Hababah-District Rural Hospital	Training: 1 midwife in pre-service training, 7 health providers trained, 1 male RL, 4 female RL.	Done 07-08	1 private practice midwife clinic	
	Furniture for current staff housing	Done 08		
Raidah-District Health Center	Training: 11 midwives trained in pre-service, 8 health providers trained on the job, 1 RL male and 2 female.		1 private midwife clinic	09
	renovation of HC+ New housing + furniture		Counseling room equipment	Done 09
	Medical diagnostic equipment	Done 07	Diagnostic equipment, RH service equipment	Done 010
			Equipment and furniture for Rayda HC visited by MT	Done 09
Jabal lal lazid-District Rural Hospital	Training: 4 midwives in pre-service training, 4 health providers trained, 1 RL male and 4 female RL trained		18 community mobilization volunteers trained	Done 09
	Building housing + furniture	Done 07		
	Building of perimeter fence, HC repairs and extension for normal deliveries	Done 07	Counseling room equipment	Done 09
	Medical diagnostic equipment, Normal delivery (EmOC) and general equipment	Done 08		
	Equipment and furniture for facilities served by MT: Bait Thaib HU.	Done 2007		
Bani Suraim-District Rural Hospital and other HCs (Damaj, Sanahnih and Waadah)	Training			
	New Model Health Center with normal delivery Unit	No	Counseling room equipment	Done 09
	Furniture for health ed. & counseling room	No	RH service equipment	
	Medical diagnostic equipment	08	Medical diagnostic equipment	010
Kharif - District Rural Hospital	Training: 8 midwives in pre-service, 9 providers trained, 1 male RL trained	07-08		
	Medical diagnostic equipment	Done 07	EmOC equipment	??
	Normal delivery equipment and furniture	Done 08	Counseling room equipment	Done 09
	Furniture for health ed. & counseling room		Housing furniture	Done 09
	Equipment and furniture for health facilities visited by MTs: Bait Zawd and Al Jelidi health units	Done 2007		

Hooth-District Rural Hospital	Training: 8 midwives in pre-service training, 9 providers trained, 1 male RL.	2007-08		
	Medical diagnostic equipment, general equipment, IUD kits units	Done 2007-08	Some EmOC equipment	
	Medical equipment and furniture for Khaiwan HU visited by MT		RH service equipment	
As'sood-District Rural Hospital	Training: 6 midwives in pre-service, 4 health providers,		20 community educators trained (safe age of marriage)	Done 09
			Renovation/ Housing furniture	Done 09
	Medical diagnostic equipment	Done 07	Equipment for counseling room	Done 09
	Equipment and furniture Yemeni Women's Union Center	Done 08	Medical diagnosis and IP equipment	Done 09
	Generator repair		EmOC equipment RH services equipment	??
Thabain-District Rural Hospital	Training: 5 service providers, 1 RL male			
	Medical diagnostic equipment	Done 08		
	Renovation of HC, normal delivery extension, Housing + furniture (8 units)	Done 07-08	Medical equipment and furniture	Done 010
	Furniture for health ed. & counseling room	Done 07	Medical equipment and furniture for Al Shatbah HU and Marhaba HC visited by MT	Done 010
	Medical equipment and furniture for Iyal Kassem HU visited by MT			
Sowair - District Health Center	Training: 3 pre-service midwives1 provider and 1 RL male			
	Medical diagnostic equipment	Done 07-08		
	Build and Equip Normal Delivery Unit + furniture	Done		
	New Housing +furniture	Done		
As'soodah-District Rural Hospital	Training: 3 providers trained, 2 RL males trained.		20 community educators trained for the safe age of marriage education activity / Education Equipment for Yemen Women' union	Done 09
			MP and Lab	Done 010
Amran governorate as a whole	Equipped Hilux vehicle for mobile medical team #2 (Ultrasound +ECG + generator+ TV and video + other diagnostic and surgical instrument)+ Cell phone	Done 07	BP scaling up	Done
			Religious leaders, community mobilization group and volunteers training and deployment.	Done
	2 Mobile teams operating costs	continued	3 more mobile teams with equipment	Done 010
	KAP study	Done 06	Mobile teams support	Done
	Support to national Immunization campaign			

	Pre-service training (two courses) Teaching Equipment to Health Institute	Done 07	Midwifery kits for 50 graduates	Done 09
	Community awareness raising	Done	Bus for Health institute	Not done
	In-service training	Done		

Table 7a: Amran governorate plan, 2006-2008 and 2009-2010, targets and results.

SAADA districts and facilities	Activities 2006-2008		Activities 2009-2010	
Al-Hashwah-District Rural Hospital	Training: 1 RL , 6 health providers		18 community mobilization volunteers trained.	
	Refurbish the center, building a perimeter wall, adding a normal delivery extension	Completed		
	Build housing for SP + furniture	Completed		
	Diagnostic medical equipment	Done 08		
	Equip and furnish counseling & health education room	Done 07	Counseling room equipment	Done
Al-Safra'a-District Health Center	Training: 6 health providers, 1 RL,		18 community mobilization volunteers trained	
	Mobile team services			
	Build housing for SP + furniture	Completed		
	Build extension of normal delivery section+ furniture (Damaj HC)	Completed		
	Diagnostic medical equipment / power generator	Done 08		
	Equip and furnish counseling & health education room	Done 08		
Al-Dhaher-District Health Center	Training: 3 midwives in pre service training, 2 providers			
	Diagnostic medical equipment	Done 08	RH service equipment	
	Build extension of normal delivery section+ furniture	Not done		
	Refurbish the center and support furniture	Not done		
	Equip and furnish counseling & health education room	done		
Baqem-	Training: 7 health providers trained		1 midwife private clinic	

District Rural Hospital	Mobile team services		Counseling room equipment	Done 09
	Re-organization of service flow+ Furniture for normal delivery section		RH service equipment, EmOC equipment	
	Diagnostic medical equipment	No	Diagnostic and IP equipment package	Done 09
Haidan-District Rural Hospital	Training: 9 pre service training midwife, 4 health providers			
	Mobile team services			
	Diagnostic medical equipment	Done 08	Counseling room equipment	
	Re-organization of service flow+ Furniture for normal delivery section		RH service equipment	
	Equip and furnish counseling & health education room			
Razih-District Rural Hospital	Training: 9 midwives in pre service training, 6 health providers trained on the job			
	Build housing for SP + furniture Repair hospital drainage system	Completed Completed	Counseling room equipment	
	Re-organization of service flow+ Furniture for normal delivery section	Done 07		
	Equip and furnish counseling & health education room			
	Diagnostic medical equipment	Done 08		
Saqain - District Rural Hospital	Training: 7 midwives in pre service training, 4 health providers trained	07-08	18 community mobilization volunteers trained	
	Mobile team services			
	Equipment for operation theatre	No	Counseling room equipment	
	Diagnostic medical equipment			
	Equip and furnish counseling & health education room			
Sohar (Bani Owir As'sharqi-Health Center)	Training: 6 health providers trained		18 community mobilization volunteers trained	
	Mobile team services			
	Build housing for SP + furniture	Completed	Counseling room equipment	
	Diagnostic medical equipment	Done 08		

	Build extension of normal delivery section+ furniture	Completed		
	Build storage, kitchen and laundry for hospital	Not done		
	Equip and furnish counseling & health education room	Done 08		
Shada-District Health Center	Training: 2 midwives in pre service training, 3 health providers trained			
	Mobile team services			
	Build housing for SP + furniture	Completed		
	Diagnostic medical equipment	Done 08		
	Build extension of normal delivery section+ furniture	Completed		
	Equip and furnish counseling & health education room	Done 08		
Sada'ah city-Governorate Al Jomhoury Hospital	Training: 5 midwives in pre service training, 18 health providers trained		18 community mobilization volunteers trained	
	Mobile team services		1 private midwifery clinic	
	Operation theatre equipment	No	Operation theatre equipment, neonatal unit, Medical diagnosis and IP package	Done 010
	Equip and furnish counseling & health education room	No	Counseling room equipment	Done 010
	Neo natal unit			
	Incinerator			
Ghamer-District Health Center	Training: 2 midwives in pre service training, 3 health providers trained			
	Furniture for the center			
	Build housing for SP + furniture		Counseling room equipment	
	Diagnostic medical equipment	Done 08		
	Build extension of normal delivery section+ furniture			
Qataber-District Health Center	Training: 1 midwife in pre service training, 3 health providers trained			
	Mobile team services			
	Build housing for SP + furniture		Medical diagnosis and IP equipment package	
	Diagnostic medical equipment			
	Build and furnish delivery section			

	Build a wall			
Kitaf & Al-Boq'a-District Rural Hospital	Training: 3 midwives in pre service training, 2 health providers trained			
	Mobile team services			
	Re-organization of service flow+ Furniture for normal delivery section		Counseling room equipment	
	Build housing for SP + furniture			
	Diagnostic medical equipment	No	Medical Diagnosis and IP equipment package	Yes
	Build a wall and generator room		EmOC equipment	
	Equip and furnish counseling & health education room		RH service equipment	
Majz-District Health Center	Training: 3 midwives in pre service training, 4 health providers trained		18 community mobilization volunteers trained	
	Mobile team services			
	Build housing for SP + furniture	Not done		
	Diagnostic medical equipment	Done 08		
	Build extension of normal delivery section+ furniture	Not done		
Manabeh-District Rural Hospital	Training: 3 midwives in pre service training, 4 health providers trained			
	Housing furniture		Housing furniture	No
	Diagnostic medical equipment	Done 08	Counseling room equipment	No
	Equip and furnish counseling & health education room		RH equipment, EmOC equipment	No
	Re-organization of service flow+ Furniture for normal delivery section			
Saada governorate	Equipped Hilux vehicle for mobile medical team (ultrasound +ECG + generator+ TV and video + other diagnostic and surgical instrument)	1 (07)	2 mobile teams added	09
	Governorate Health Office building	No	Best Practices scale up	In progress
	Mobile Team operation cost	Done	Teaching models for Institute	Yes
	KAP study		Bus for health institute	No
	Support Immunization campaign	No	Additional Mobile team vehicle with equipment	No

	Pre-service training (two courses)	Done	46 midwifery kits for graduates	Done 09
	Community awareness raising	Done	Community awareness raising	Yes
	In-service training	Done	In-service training	Yes

Table 7b: Saada governorate plan, 2006-2008 and 2009-2010, targets and results.

MARIB districts and facilities	Activities 2006-2008		Activities 2009-2010	
Majzer - District Rural Hospital- 7 th July	Training: 6 midwives in pre service training, 8 providers trained, 2 male RL trained			
	New housing & furniture	Done 07	Counseling room equipment	Done 09
	Water Tank	Done 07	RH service equipment and EmOC equipment	No
	Medical equipment and furniture for Al Sahari health Unit visited by MT	Done 07		
	Medical equipment and furniture for July 7 Hospital	Done 07		
Raghwan - District Health Center	Training: 2 midwives in pre service training, 4 providers trained, 1 male RL		Medical diagnostic package (Asdas HC)	Yes 010
	Package of diagnostic medical equipment	No	Medical diagnostic package (Raghwan HC)	Yes 010
	Housing furniture	Done 08	RH equipment	no
Madghal District Rural Hospital	Training: 2 midwives in pre service training, 5 health providers trained, 1 male RL		Medical diagnosis packages (Medghal hospital and Al Amzrak HU Counseling room furniture and equipment	010
	Awareness raising activities			Yes 010
Marib city- Dr. Hayal Mother & Child HC	Training: 5 midwives in pre service training, 24 health providers trained, 3 male RL, CMG formed	Done		
	Delivery instruments	Done		
	Laundry machine	Done		
	Modification of partitions, Completion of X-ray Unit, other improvements	Done		
	Air-conditioners for Hayel HC	Done	Furniture and equipment for health education and counseling	Done 09
	New Training Center New Housing for providers	Done	Al Wash health center consultation room for MT visits	Done 010
	Marib President Hospital: small instruments, training in cooperation with USG military	Done		
	Manin Al Haddad HU visited by MT: equipment and furniture	Done 07		

Surwah - District Rural Hospital	Training: 2 midwives in pre service training, 5 health providers trained, 2 male RL and 4 female RL.	Done	18 community mobilization volunteers trained	09
			Counseling room equipment	Done 09
	Sanitation and toilet facilities repairs		RH service equipment and EmOC equipment	
	Furniture for housing (8 units)	No	Al Mahjaza HC counseling room furniture and general furniture	Done 09
	Al Zoor HC visited by MT: equipment and furniture	Done 07	Al Hajlan HC, medical diagnosis package	Done 010
Marib Al-Wadi- Al-Kara Health Center & Al-Hasoon Health Center	Training: 5 midwives in pre service training, 7 health providers trained, 2 male and 4 female RL trained		18 community mobilization volunteers trained	
	Medical equipment for Al-Husoon			
	Furnish and equip delivery room (Al-Husoon)			
	New Extension for expanded normal delivery unit (Al-Kara)	Completed	1 private midwife clinic set up at Al Husoon	09
	Furniture for health ed. & counseling room (Al-Husoon)	No	Al Husoon hospital: counseling room equipment, clinic furniture	Done 09
	Equipment and furniture for Al Taheel HU visited by MT	Done 07		010
	Equipment and furniture for Al Saqet HU visited by MT	Done 07		
Equipment and furniture for Al Lahqah HU visited by MT	Done 07			
Harib Al-Qaramish- District Health Center	Training: 2 midwives in pre service training , 3 health providers trained, 1 male RL	Done 06-08	17 community mobilization volunteers trained.	Yes
	Furniture for Housing + generator	Done 06	Counseling room furniture and equipment	09
	Diagnostic medical equipment	Done 08		
	Furnish and equip delivery room	Done 08		
Bidbidah- District Health Center	Training: 3 midwives in pre service training, 4 health providers trained, 1 male RL	Yes	Medical diagnosis package for Hazm Al Makarit HC	Yes 010
	Diagnostic medical equipment	No	Medical Diagnosis and IP equipment for Bidbida rural hospital	Yes 010
	Furnish and equip delivery room	No	Counseling room equipment	Done 09
Al-Jubah- District General Hospital 26 th September	Training: 2 midwives in pre service training, 15 health providers trained, 1 male RL and 3 female RL	06-08	16 community mobilization volunteers trained	09
	Modification of existing building to set up a new operation theatre	Done 07	1 private midwife clinic	09
	Medical equipment for operation theatre and neonatal care	Done 07	Medical diagnosis package and lab for 26 Sept	Done 010

	Furniture	Done 08	Hospital, and Al Jubah HC	
	Yaarah health Unit		Yaarah health Unit medical diagnosis package	Done 010
	May 22 hospital: medical equipment	Done 07	Al Khaithlah health center visited by MT: : medical equipment and furniture	Done 010
	Najaa health unit: : medical equipment	Done 07	Najaa health unit consulting room visited by MT	Done 010
			Counseling room equipment for 3 HCs	Done 010
Jabal Murad-District Rural Hospital	Training: 2 midwives in pre service training, 5 health providers trained, 1 male RL	06-08	1 private midwife clinic	
	Repairs to Housing units	Done		
	Repairs to HC and New extension for normal delivery unit	Done 07	Al Maood health Unit visited by MT, consultation room equipment and furniture	Done 010
	Equipment for normal delivery / EmOC	Done 07		
	Housing furniture (2 units)	Done 07		
Rahabah-District Health Center	Training: 32midwives in pre service training, 4 health providers trained, 1 male RL		1 midwife private clinic	
	Building Repairs including roof	Completed	Counseling room equipment	
	Generator repair	Done		
	New normal delivery extension	Done 07	2 Medical diagnosis and IP equipment package (HC in Rahabah	Done 010
	Equipment for delivery room	Done 08		
	Furniture	Done 08	Generator for HC in Mothrah	Done 010
Harib - District Rural Hospital	Training: 3 midwives in pre service training, 8 health providers trained, 3 male RL and 5 female RL			
	Hospital Laundry Unit	No		
	Furniture for health ed. & counseling room	No	Counseling room equipment	Done 09
	Medical instruments	No		
Al-Abdeiah-District Rural Hospital -Ali Adulmugni	Training: 5 midwives in pre service training, 2 health providers trained, 1 male RL			
	Furniture for Housing		Furniture for Housing	
	Diagnostic medical equipment	No	Medical diagnosis and IP equipment package	No
	Hospital rehabilitation and sewerage system and toilets repairs	Completed	Counseling room equipment	Done 09
	Improve water supply system	Completed	RH service equipment	No
Al-Mahiliah-District Health	Training: 2 midwives in pre service training, 2 health providers trained, 1 male RL	Done	Generator	010

Center	Furniture and equipment for delivery room		Counseling room equipment	
	Diagnostic medical equipment Al Amood HC	Done 08	RH service equipment and EmOC equipment	No
	Housing furniture	Done 08	Aal Aba Al Gaith HU visited by MT consultation room equipment and furniture	Done 09
Marib governorate as a whole	Equipped Hilux vehicle for mobile medical team (ultrasound +ECG + generator+ TV and video + other diagnostic and surgical instrument)+ Al-Thuraya cell phone	07-08	Best Practices scaling up	
	Mobile Team operating costs	07-08	Bus for health institute	No
	KAP study		RH vehicle	010
	Support Immunization campaign	Yes	Mobile teams (1+2)	09-10
	Pre-service training (two courses)	Yes 06-08	44 Midwifery kits for graduates	09
	Community awareness raising	Yes	Community awareness raising (CMG and volunteers), religious leaders	
	In-service training: 86 health providers from governorate level, 110 from districts	06-08	2 School health Mobile teams	010
	Health training Institute: equipment	07	Health training Institute: models and training: 9 trainers trained	09-10

Table 7c: Marib governorate plan, 2006-2008 and 2009-2010, targets and results.

SHABWA districts and facilities	Activities 2006-2008		Activities 2009-2010	
Ain-District Rural Hospital	Training: 3 health providers trained, 1 male RL			
	Sterilization oven + centrifuge for the lab		EmOC equipment	
	Spare part for dental unit			
Markha As'sofla-Khura Health Center	Training: 5 Health providers trained (1 from Khoura 3 from Al Hajeer and 1 from Waset health center). 1 religious leader			
	Lab equipment (Waset)		Diagnostic and IP equipment (Khawra)	Done 010

	Building new health center (Khora)	No	Housing furniture	No
	Medical equipment		EmOC equipment	No
Markha Al-Olia-Alager Health Center	Training: 2 health providers trained			
	Build house +furniture	Completed 07		
	Medical diagnostic equipment for Khaura center	No	Diagnostic and IP equipment	Done 010
	Furniture and equip the center	Yes		
	Generator	07		
Baihan -	Training: 1 midwife in pre service training, 6 health providers trained			
Jardan - District Rural Hospital and	Training: 3 midwives in pre service training, 1 male RL	06-08		
	Health education equipment	No	Counseling room equipment	Done 09
	Spare part for dental unit	No	RH and EmOC equipment	No
	Lab equipment	08		
	General equipment for Ayath health unit visited by the MT	08		
Nisab - District Rural Hospital	Training: 6 midwives in pre service training, 5 health providers trained, 1 male RL	06-08	17 community mobilization volunteers trained	09
	Health education equipment		Counseling room equipment	Done 09
	Building housing for providers and furniture	Done	RH equipment	No
	Al Jafr health unit: visited by MT: equipment and furniture	08	4 midwives established in their private practice clinics	010
	Al Saibah HU visited by MT: equipment and furniture	08		
	Al Hanak HU visited by MT: equipment and furniture	08	Al Ribat Al Dini: medical equipment	010
	Al Ribat Al Dini: medical equipment	08		
	Amkadah HU visited by MT: equipment and furniture	08	Al Jubah health clinic: medical equipment	010
Ateq- Governorate Hospital	Training: 7 midwives in pre service training, 17 health providers and 11 male RL trained		21 community mobilization volunteers trained	
	Refurbish delivery room and links it to the MCH section			
	Internal radio for health education			
	Al Shabeekah health unit: visited by MT: equipment and furniture	08	Al Riabt Al Dini Ataq: visited by MT: equipment and furniture	09-010
	Nawkhan HU visited by MT: equipment and furniture	08		
	Qura Al Mahdi HU visited by MT: equipment and furniture	08		
	Institute for Health sciences	07		

As'saeed-District Rural Hospital-Jamal Abdel B19Nasser Hospital	Training: 5 midwives in pre service training, 12 health providers trained, 2 male RL trained	06-08	13 community mobilization volunteers trained	Yes
	Furnish MCH section			
	Health education equipment	No	Counseling room equipment	Done 09
	IUD kits units			
	Equip the lab (refreg + equipment)			
	Al Sefal HU visited by MT: equipment and furniture	08		
	Maqbelah HC visited by MT: equipment and furniture	08	Jamal Abdalnasser	09
	Al Musainaah hospital visited by MT: equipment and furniture	08	Al Musainaah hospital	010
Arma'a District Hospital	Training: 2 midwives in pre service, 2 health providers trained and 1 male RL			
	Refurbishing and repairing the hospital, new extension for normal delivery	Completed		
	Build housing + furniture	Completed	No	
	Normal Delivery equipment	08	Counseling room equipment	Done 09
	Furnish and equip MCH center	08		
Dohr District Health Center	Training:1 health providers trained and 1 male RL	06-08		
	Build housing + furniture	Completed 07		
	Cable for connect generator and medical equipment package		Diagnostic and IP equipment package	Done 010
Attalh-District Health Center	Training: 3 midwives in pre service, 2 health providers trained and 1 male RL			
	Health education equipment	No	Counseling room equipment	Done 09
	furnish and equip MCH section			
Al-Rawdah-Mother & Child Health Center	Training: 7 health providers trained, 1 RL	Yes		
	Ultrasound + ECG for MCH center	Yes	RH equipment	No
			Diagnostic and IP package	No
	Generator for MCH center	Yes		
Ghareer El Ghail HC	08			
Habban - District Rural Hospital	Training: 2 midwives in pre service, 7 health providers trained		20 community mobilization volunteers trained	Yes
	Furniture for normal delivery room			
	Lahyah HU visited by MT: equipment and furniture	08		
	Al Khabar HU visited by MT: equipment and furniture	08		
	Habban Health Uni visited by MT:	08		

	equipment and furniture			
Maifa'a - District General Hospital	Training			
	Maintain surgical theatre	No	2 midwives in private practice clinics	09
	Health education equipment		Counseling room equipment	Done 09
	Equip operation theatre	No	Operation Theater (EmOC) + Neonatal care Unit	Yes 010
	Furnish and equip MCH center	Yes 08	Medical diagnosis package	010
Rodom	Training: 6 midwives in pre service training, 5 health providers trained and 1 RL	Yes	RH equipment and EmOC equipment	No
Osailan	Training	Yes	Consultation room equipment	010
Hateeb - District Health Center	Training: 1 health provider trained			
	medical equipment package	No	Diagnostic and IP equipment package	No
	Build new center + second floor as housing and furniture	No	Housing furniture	No
Shabwa governorate as a whole	Equipped Hilux vehicle for mobile medical team (ultrasound +ECG + generator+ TV and video + other diagnostic and surgical instrument)	Yes	Third MT with equipment	Yes
			2 mobile teams for school health	Yes
	Team operation cost	yes	Support to mobile medical teams	Yes
	KAP study	06 done	IT equipment for health office	Done 09
	Support Immunization campaign	Done	RH equipment for Ribat NGO	Done 09
	Pre-service training (two courses) 11 midwives on governorate list (from other gov's)	Done	45 kits for graduating midwives	Done 09
	One Bus for the Health Institute	Done	Community Mobilization group and volunteers outreach	Done
	Community awareness raising	Done	Religious leaders outreach	Done
In-service training: 59 health providers trained from gov level, 103 others from districts	Done	In service training and best Practices scale up.	Done	

Table 7d: Shabwa governorate plan, 2006-2008 and 2009-2010, targets and results.

AL JAWF districts and facilities	Activities 2006-2008			
AL HAZM- District Mother & Child HC	Training: 3 midwives in pre service training, 9 health providers trained, 5 male RL and 2 female RLs trained	06-08	1 private clinic for midwives in 09 and 4 in 010	09-10
	Modifications to new Mother and Child Health Center: Partitions, Infection	06		

	prevention improvements, electricity and water connections			
	Facilitate staff migration to Al Jawf and retention (transport / housing)	Housing repaired and furnished	Al Hazm hospital targeted for Best Practices scale up	No. Lack of staff and continuing issue with hospital land ownership.
	Comprehensive EmOC set up at Al Hazm general hospital	Not done. Issue with Hospital land ownership.		
	Provide more equipment to Al Hazm MCH center	Done	17 community mobilization volunteers trained	09
AL KHALEQ-District Health Center	Training: 2 midwives in pre service training, 5 health providers trained, 1 male RL		1 private clinic for midwives in 09 and 2 in 010	09-010
	Facilitate staff migration to Al Jawf and retention (transport / housing)	Done but staff did not stay long		
	Modifications to new Mother and Child Health Center	Completed		
	Provide more equipment	Done		
AlKhab Washaaaf-District Health Center	2 health providers trained, 1 male RL trained	06-08	Some EmOC equipment	No
	Diagnostic Medical Equipment	No	4 midwifery private clinics established	010
Al Humaidat-District Health Center	1 midwife in pre service training, 4 health providers trained, 1 female RL.		1 midwifery private clinic established	010
	Diagnostic Medical Equipment			
Al Matammah-District Health Center	Training: 2 midwives in pre service training, 2 health providers trained, 1 male RL	06-08		
	Diagnostic Medical Equipment	No		
Al Zaher- District Health Center	Training: 1 health provider trained	06-08		
	Diagnostic Medical Equipment	No	1 private midwife clinic	010
Al Masloob- District Health Center	2 midwives in pre service training, 4 health providers	06-08	14 community mobilization	09

	trained		volunteers trained	
			2 private midwifery clinics set up	010
	Diagnostic Medical Equipment	No	EmOC equipment	No
Al Ghail- District Health Center	Training: 2 midwives in pre service training, 3 health providers trained, 2 male RL	06-08	18 community mobilization volunteers trained	09
	Diagnostic Medical Equipment	No		
Barat Al Anan- District Rural Hospital	Training: 2 midwives in pre service training, 10 health providers trained, 1 male RL	06-08		
	Diagnostic Medical Equipment	No		
Rajoozah-District Health Center	3 health providers trained, 1 male RL	06-08		
	Diagnostic Medical Equipment	No		
Al Mutoon- District Health Center	Training: 1 midwife in pre service training, 3 health providers trained, 1 male RL	06-08	10 community mobilization volunteers trained	
	Diagnostic Medical Equipment	No		
Kharab Al Mawashi- District Rural Hospital -Al-Abaraq	Training: 2 midwives in pre service training, 9 health providers trained, 1 male RL	06-08		
	Diagnostic Medical Equipment	No		
Governorate as a whole	Training: 54 health providers trained, 1 male RL		Continued support for mobile teams	09-10
	2 Equipped Hilux vehicles for mobile medical team (Ultrasound +ECG + generator+ TV and video + other diagnostic and surgical instrument)+ Cell phone	Completed 2007	Support to RH service director	
	Mobile teams operating costs (2)	07-08	Governorate – wide Polio Immunization campaign	Done 09
	KAP study		18 kits for midwives	Done 09
	Support to national Immunization campaign			
	Pre-service training to train midwives (two courses)			
	Community awareness raising			
	In-service training			

	2 vehicles for supervision and program support (Rh and PHC)	Delivered 2007		

Table 7e: Al Jawf governorate plan, 2006-2008 and 2009-2010, targets and results.

Sana'a Capital Activities 2006-2008		Status at end of 2008
Al Sabaeen Hospital: Partitions to set up Counseling room and breastfeeding room Equipment for delivery room, as part of Best Practices project supported by ESD		Completed
Support to National Yemeni Midwives Association		Completed
Support to establish National Safe Motherhood Alliance		Completed
Support to establish Yemeni Public Health Association		Completed
Sanaa City interventions 2009 -10 improving normal delivery services and referral at PH centers and referral hospitals		Status at end of 2010
Al Sabaeen Hospital	EmOC Equipment and supplies. Audi visual education system set up in waiting post delivery rooms	Done 09-10
Al Zubeiri Hospital	Renovation to set up a special room for the Sterilizer.	Done 010
	Diagnostic and IP equipment (large sterilizer) / comprehensive	Done 09
	EmOC equipment (partial)	Done 09
Azal Health Center	Renovations of the RH service rooms	Done 09
	EmOc equipment,	Done 09
	RH service equipment	Done 09
	Counseling room equipment	Done 09
Al Saleh Health center	Extension for normal delivery, power generator room. Counseling equipment / RH and normal delivery (EmOC) equipment	Done 09-10
Beni Hawath HC	Renovation of hospital to improve RH and maternity unit. EmOc equipment, RH service equipment, counseling room equipment / diagnostic and infection control equipment	Done 09-10
Al Olofi Health Center	Renovate and improve flow in existing new building for new maternity unit.	Done 09
	EmOC equipment	Done 010
	RH service equipment and furniture	Done 010
	Counseling room equipment	Done 010
	Small operations equipment	Done 010
	Neonatal resuscitator	Done 010

Kuwait Hospital	Medical diagnosis and EmOC Equipment	Done 010
Yemen Family Care Association	Emergency Obstetric and neonatal care equipment	Done 010
Red Crescent Society	Diagnostic equipment	Done 09
Health Office in Sanaa Capital governorate	Mobile team vehicle and equipment RH supervision and supplies vehicle	Delivered 09
	Support to Community Mobilization Volunteers from NGOs to conduct awareness sessions using the community health education manual	90 volunteers
Sanaa University / MOPHP	Youth RH information unit at University	Done 09
Health Institute Sanaa	Training models	Done 09

Table 7f: Sanaa capital city plan, 2006-2008 and 2009-2010, targets and results.

Taiz, Al Solw district	2006-2008		2009-2010	
Al Solw Distric-Bait Al-Qadi Rural Hospital, Taiz Governorate (requested by USAID)	Renovations to Beit Al Gadhi health center, build a new generator room	Done		
	Training of midwives in IUD	Done		
	Provide medical equipment (incl X Ray machine), furniture and a generator	Done		
	Facilitate implementation of Governorate agreement signed with MOPHP, USAID.	Done		

Table 7g: Other governorates plans, 2006-2008, targets and results.

OTHER/ NATIONAL	Activities with MOPHP Population Sector 2006-2008	Status at end of 2008
National	Coordination within RHTG	Done
	Commodity Security training	Not done
	National MOPHP/ RH meetings	Done

	Support for Pop sector to review national RH strategy	Done
	Participation of Yemeni health officials at international events	Done
	Support to Population Sector for Standards and guidelines	Revision of contents
	Training of MOPHP/Pop Sector staff	Not done

Table 7h: Plan for assistance to the MOPHP, 2009, targets and results.

Activities with MOPHP / Population Sector 2009	Status at end of 2009
Monthly meetings of Technical Group	Meetings attended regularly
Training in M&E	Done
MOPHP/ RH annual and semiannual meetings for reviews and planning	Done
Updating registers and records / training staff on registers	Partially done
Printing and distribution of referral manual.	Done / partially
TOT on referral manual for governorates	Done / partial
Updating and Printing of manuals on supervision	Done / partial
TOT of governorate RH staff	Done
Population sector integrated support visits	Not done
Training governorate staff on integrated services manual	Done partially
Revision of national RH guidelines manual	Done
Workshops to endorse RH guidelines	Done
Printing and distribution of RH guidelines	Done
Capacity building of MOPHP/PS in research and proposal development	Not done
Studies on selected issues	Done
Workshop to validate national newborn strategy and work plan	Done
Development of Neonatal care manual and TOT	Done
TOT courses on infection prevention	Done
Distribution of clean delivery kits	Not done
Follow up on midwifery training in governorates	Done
Develop and distribute materials for raising awareness and initiate BCC activities	Done
National training on supply manual	Not done
Rehabilitation of warehouses	No
Training of physicians in insertion of implants	No
Update family planning manual, print, distribute, train trainers in governorates	Done
Training courses on family planning for providers	Done
Scale up of quality improvement teams in health facilities	Done
TOT for RH service providers in Best Practices in MNCH/FP	Done

Scale up BPs in 6 major hospitals using Sabaeen model	Done
Establish Youth friendly RH centers at universities	Done in Sanaa, not in Amran
Participation in summer camps	Done
Review and update safe motherhood law	Not done
Organize visits, meetings and events targeting lawmakers	Not done
Produce materials to counter negative propaganda against RH	Not done

Table 7i: Plan for assistance to the MOPHP, 2009, targets and results.

Children under 5 vaccinated through polio campaign	15,901			358,667	-	374,568
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2010 Plan of assistance to MOPHP/ Population sector	Status at end of 2010
Participate in development of the next five year strategy (TA and shared costs of a workshop)	Done
Support the development or updating of a national strategy for health education (BCC) (national consultant costs, costs of a workshop)	Done
Support development of supervision system and tools (checklists, reports, guidelines and manuals);	Done
Training of supervisors (governorate level),	Done
Support to periodic planning and review meetings needed by the PS with the governorates; (cost of participation of representatives of USAID target governorates in one MTR workshop and one annual plan workshop)	Done
System to record mortality cases in hospitals and audit mortality causes in Al Sabaeen in Sanaa	Not Done
Improve and implement the monitoring and supervision system for RH, training of governorate supervisors and development of governorate supervision plans (USAID-PHR)	Partially Done
Assess and complete the health information system (HIS) for RH : assessment, guidebook, system development and related training, update registers and record cards, printing and distribution of new registers (USAID-PHR)	Partially Done
Training of PS staff in program management skills	Not Done
Support the integration of gender concerns in health interventions (gender training for PS and governorates staff)	Done
Training of midwives in mapping skills	Done
Support MOPHP / HIHS in establishing a training program for health education (consultant costs)	Done

Gender, policies, strategies, legislation, safe motherhood advocacy and rights, celebration of national and international RH related events including World Contraception day (WCD) , World Breastfeeding Week, World Midwifery Day, advocacy events for Youth and Safe Motherhood campaigns.	Done
Awards for best media support to RH/FP (twice a year- in cooperation with MOPHP and MoI)	Done
BHS will provide support (trainers and materials) to the MOPHP to implement Best Practices in MNH/Family Planning (2 hospitals in Hodeida (Jomhoury) and Hadhramout (Bacher Ahyal)	Done
Expand home based services by private midwives to provide antenatal and postpartum care	Done
Support the development, printing and distribution of manuals and protocols; (costs shared among various DPs)	Done
Training of trainers on manuals (12) and protocols (8) in maternal and neonatal health, BHS normally will assist with the costs of interventions that MOPHP implements for a group of governorates by covering the participation of the 6 focus governorates among them.	Partially Done
BHS will support the production of client materials related to the MNCH/RH/FP messages for distribution in health facilities (cover quantity needed for USAID target governorates within total volume printed with support from all donors)	Partially Done
BHS will support the establishment of youth centered education and services programs starting with Universities (Sana'a and Amran) and will provide training in the development and management of youth related programs, support for open information days and other BCC events.	Partially Done
BHS will support the scale up of the Best Practices in MNCH/FP initiated in September 2007 by USAID. In 2010 this will involve sponsorship of Yemeni participation at the second technical meeting to be organized by USAID in Bangkok Thailand in March 2010 and facilitation of the required preparatory country team meetings for developing presentations and country scale up plans (this started in 2009).	Done and continuing under MOPHP leadership with support from Pathfinder and ESD
Support the PS Health Friends Initiative in schools	Done
BHS will support the MOPHP in training media personnel in the messages of the community health education manual CHEM, in collaboration with the Ministry of Information	Done
Train health education coordinators on the use of the community health education manual	Done
Train counseling staff on using the community health education manual	Done
Train religious leaders on using the community health education manual	Done

Develop standards texts and booklets for use by preachers	Done
In close collaboration with the MOPHP and the Ministry of Information (Mother and Child Division) BHS will support a full year schedule of radio programs (short spots) disseminating all 42 messages of the CHEM on a daily basis through 14 regional radio stations throughout the whole year.	Done
Support the use of mobile cinema for campaigns and community based education	Partially Done
To conduct a research on mortality figures related to early marriage and pregnancy.	Not Done
Survey to assess governorate needs and status of services for EmONC (BHS is conducting a similar study in USAID focus governorates, will share tools and TA with MOPHP).	Done

Table 7j: Plan of assistance to MOPHP, 2010, targets and results.

Discussion:

Discrepancies between planned and implemented activities are due to one or more of the following factors:

- Non implementation of renovation and buildings are due to the uncertainties about funding so as of 2007 BHS was not able to schedule renovation contracts.
- Non distribution of equipment can be due to either of the following:
 - The building was not renovated or had no staff assigned to it by the MOPHP
 - The security situation prevented timely distribution (Saada and Al Jawf).
 - The MOPHP office in the governorate was not functional (Al Jawf) and could not guarantee the proper management of resources if they were handed to them.

As will be seen in the discussion of results, most of the planned activities were implemented. There are more details in the following sections which consolidate the presentation of activities and results by area if activity.

Annual progress and results, achievements by area of activity

As illustrated in the USAID performance monitoring indicators list (2006-2009) and PMP (2010) indicators sheets, the targets agreed to with USAID have been consistently met or surpassed. USAID monitoring targets have been set each year, more or less based on previous year's actual achievements and they were often revised with USAID at mid course to make sure they are closer to reality. The planned activities in the governorates have been implemented to the extent that there was funding available. Only a few numerical targets were set by USAID and monitored each year; however BHS kept track of all achievements of the program and of progress in implementing the governorate workplans formulated in 2006 and 2009. The largest elements of the BHS program were renovations and equipment and the targets for these were set at the start of each phase of the BHS program in 2006 and in 2009 rather than annually because of the lengthy time requirements for these activities.

In the second year of the project (2007) the BHS targets for construction were revised down to nothing, because USAID funding was uncertain throughout the remaining part of the project life. No mid or long term commitments could be made that would allow for planning even over a one year period. USAID funding became a series of short term incremental amounts designed to keep the project running but without the ability to commit to activities that require a long term commitment such as building or pre service training. As a result of cancelling construction activities, some of the equipment ordered on the basis of the refurbished facilities needs was left undistributed from the first phase of the project and was used in the second phase (extension of 2009-10)

In the areas of training, education, mobile medical services and a group of added activities initiated with help from the ESD project, BHS has achieved its objectives or achieved as much within its budget as can be possibly be done. The major testament to that is that the budget was fully spent each year, the project was constantly asking for the promised funding for years 2 and 3, the burn rate was commensurate with the approved budget but there were many instances where due to UAID funding uncertainties we were told to stop spending and slow down.

BHS performance was assessed in July 2009 by USAID and the summary of **Key Findings and Recommendations for BHS was:**

- The BHS Project is well managed, making strong progress within difficult environment and fragile health care system in five challenging governorates. Activities implemented in those focus governorates are highly valued by the health staff and officials at the national, governorate, and facility level.
- The renovations and refurbishing of health facilities provided visible and immediate improvements, and have resulted in higher rates of utilization. However, the proposed

shift of emphasis from renovation and refurbishing facilities to more intensive work on improving quality and building capacity of the health system is appropriate.

- Community midwives are the most important avenue to provide family planning, and maternal and child health services in Yemen. BHS needs to intensify its supervision, monitoring and support to midwives and expand the private practice midwifery program.
- The expansion of mobile teams to remote and under-served areas has helped reach more people with reproductive and child health services and provided much needed support to poorly-staffed, small clinics. This program should be expanded even further with close oversight from BHS.
- A successful pilot program in Sana'a for "Best Practices", now being scaled up in six hospitals in two of the target and four new governorates, introduces globally-recognized, low cost, high impact services for mothers and newborns that will help prevent deaths and improve health outcomes. It should be expanded in general hospitals of the remaining focus governorates.
- Religious leaders and women-led NGOs are providing, with support from BHS, a critically important role for health education at the community level. They lend credibility to the effort and help reduce cultural sensitivity and increase acceptability of the reproductive health messages. Since 2006, 664,669 people have participated in BHS community educational sessions.
- BHS should work closely with other donors and the Primary Health Care sector in the Ministry of Public Health and Population (MOPHP) to ensure a common approach to training, supervision, and quality improvement for reproductive and child health services.
- For the extension period, BHS should develop a complete Performance Monitoring Plan (PMP) and include key outcome level indicators to enable USAID and the MOPHP to determine the efficacy and impact of BHS interventions.

The BHS project outputs for the full 5 year period are listed below according to objectives and targets. The initial targets set in 2006 for construction were not met because as soon as 2007 USAID started facing difficulties in meeting its funding obligations and could not provide BHS any assurances that the planned funding will be available to enable BHS to commit to infrastructure activities (building and renovations) or pre-service training activities which usually take one year to set up and two more to implement. In 2007 and 2008, limited funds were provided every few months to keep the project running but not in any substantial amount and with sufficient time ahead to allow the project to execute the infrastructure activities it had planned to implement with its MOPHP partners in governorates such as Saada, Shabwa and Amran and Marib where such infrastructure was needed (Al Jawf had received a massive package through the Public Works Project which upgraded the infrastructure in all of its districts)

Annual key indicators values **Incorporating key PMP indicators**

	INDICATORS	Baseline Dec 05 USAID Catalyst 2004-05	2006	2007	2008	2009	2010	Total 2006- 2010
IR 5.1: Increased Access to Quality Health Service and Participation at the Community Level	Sub-IR 5.1.1 Health facility refurbishments completed in all five governorates							
	Total number of project health facilities renovated or constructed	21	0	22	2	5		29
	Total number of basic EmOC units (delivery units) added	4	0	3	6	1	7	17
	Total comprehensive EmOC units added (construction <u>and / or</u> equipment)	3	0	2	0	1	3	6
	Total neonatal units added	4	0	0	1		7	8
	Total number of health facilities equipped (*)	20	0	52	56	17	62	146 (*) (187)
	(*) The total number of facilities benefiting from equipment is 146 although the totals from year 1 to 5 are 187, some health facilities received equipment on more than one occasion.							
	Number of clients served at MOPHP facilities assisted by BHS (each year)	n/a	105,440	162,758	234,580	n/a	n/a	n/a
	Sub-IR 5.1.3 Increase in # of Staff from project health facilities trained in delivery of quality FP/MCH services.							
	Number of participants trained from health facilities	531 (04-05)	423	595	538	744	1812	4112
Total number of health facilities where staff housing was added by BHS project (building and / or furnishings)	3	1	15	13	5	4	38	
Sub-IR 5.1.4 Increase in contraceptive availability rate in Project health facilities								
Sub-IR 5.1.6 Mobile teams established and delivering services.								
Number of mobile teams' clients per year	22,576	22,795	63,045	97,886	130,694	160,590	475,010	

	Total number of mobile teams deployed / supported (cumulative)	3	3	10	12	15	20	20
	Total of Health Facilities served by mobile teams once a month based on a 5 facilities per week schedule (*) actual number is less due to some facilities being visited more than once a month)	60	60	200	240	300	400	400
	Sub-IR 5.1.7 Trained community midwives (CMs) implementing rural outreach activities.							
IR 5.1, cont'd	Number of midwives in short term training in essential RH/FP/MCH skills.	383	156	229	119	209	564	1277
	Number of midwives in pre-service training (<u>graduated</u>)	141	<u>141</u>	240	217	<u>203</u>	0	<u>344</u>
IR 5.2: Increased Health Knowledge and Improved Behaviors at the Community Level	Sub-IR 5.2.1 Health education messages developed and disseminated in support of project interventions.							
	Number of health education messages developed, produced & distributed	7	20	20	45	45	45	65
	Sub-IR 5.2.2 Systematic counseling services in RH/MCH strengthened.							
	Number of staff trained in counseling (separate course or integrated with other skills / subjects)	120	86	163	0	318	1002	1566
	Number of facilities with dedicated counseling room	20	22			20	31	73

Sub-IR 5.2.3 Community outreach workers, local council members, teachers and agriculture extension workers mobilized and delivering health messages.							
Number of persons trained from non-health sector (Religious leaders, educators, etc.)	24	40	145	125	1010	172	1492
Number of events (meetings) organized to raise community awareness (by 145 RL, 5 Community Mobilization groups and volunteers, 5 BHS governorate coordinators)	159	341	1680	8138	25213	38357	73729
Total number of participants attending the community awareness meetings	3,702	13,139	137,735	573,298	1,062,622	1,009,594	2,796,388

Table 8: BHS performance indicator values for 2006-2010.

Additional Indicators submitted annually to USAID

Additional USAID Operational Plan Indicators						
	2006	2007	2008	2009	2010	Total
# of children less than 12 months of age who received DPT3 from USG supported programs	56,702	65,103	76,421	94,463	-	292,689
# of USG-assisted service delivery points providing FP counseling or services (fixed centers and centers visited by Mobile teams)	144	316	535	541	623	623
# of counseling visits for FP/RH as a result of USG assistance	90,437	92,275	123,460	147,442	-	453,614
Couple years of protection (CYP) in USG supported programs	14,956	17,083	19,403	19,619	-	71,061
Additional Custom Indicators						
	2009		2010		Total	
# of women giving birth who receive counseling about HTSP and postpartum family planning including LAM in selected health facilities, where BPs are implemented through USG support	4,456		25,379		29,835	
% of women giving birth who receive counseling about HTSP and postpartum family planning including LAM in selected health facilities, where BPs are implemented through USG support	38%		64%		51%	
# of post abortion clients who receive information on post abortion HTSP and family planning in selected facilities where this service is supported through a USG program	251		2,260		2,511	
% of post abortion clients who receive information on post abortion HTSP and family planning in selected facilities where this service is supported through a USG program	29%		66%		48%	

Table 9: additional USAID mandated and other custom indicators in PMPs

Results by area:

1. Building and renovations

a. Summary list

	Subcontract location, Purpose and Start date	Total amount	Completion date
1	Al-Gafila renovations 7-17-06	\$911.90	Feb 07
2	Majzar (Marib) HC Normal Delivery Unit 9-10-06	\$98,620.00	Feb 08

3	AlRahaba Hospital Renovations (Marib) 10-10-06	\$47,983.93	Jan 8
4	Shaheed Hail Health Center extension (Marib) 10-1-06	\$213,472.29	Apr 08
5	Al Kara Health center extension) (Marib) 10-01-06	\$91,267.79	Feb 08
6	Al-Badia Hospital Renovation (Marib) 10-01-06	\$45,551.97	Jan 08
7	Jabal Murad Hospital; renovation (Marib) 10-01-06	\$108,764.94	Jan 08
8	Contract of Al-Juba Hospital renovation (Marib) 10-01-06	\$27,223.26	Jan 08
9	Haboor Dhulaima Hospital (Amran) 11-15-06	\$97,488.88	Nov 07
10	Jabal Yazeed Hospital (Amran) 11-15-06	\$191,287.53	Dec 07
11	Suweer Hospital (Amran) 11-15-06	\$144,935.00	Nov 07
12	AL-Aqer Hospital (Shabwa) 11-20-06	\$101,524.99	Jan 08
13	Al Dohr Hospital (Shabwa) 11-22-06	\$112,483.00	Jan 08
14	Al Arma Hospital (Shabwa) 12-13-06	\$213,134.97	Aug 08
15	Al Razeh Hospital (Saada) 01-21-07	\$89,513.00	Jan 08
16	Thebeen Hospital (Amran) 01-21-07	\$138,960.00	Dec 07
17	Khamer Hospital (Amran) 01-21-07	\$48,555.00	Dec 07
18	Nesab Hospital (Shabwa) 01-21-07	\$97,582.13	Jan 08
20	Sheda Hospital (Saada) 03-03-07	\$169,865.75	Jan 08
19	AL-Hashwa Hospital (Saada) 03-03-07	\$97,167.71	Jan 08
21	AL-Solw Health Center (Taiz) 02-11-07	\$28,290.19	Dec 07
22	Al -Jawf health center renovations 03-24-07	\$17,317.46	Jan 08
23	AL-Damag Hospital (Saada) 03-31-07	\$129,121.42	Jan 08
24	Sahar Hospital (Saada) 05-14-07	\$183,179.18	Aug 08
25	Azal Health Center renovations (Sanaa) 07-13-09	\$19,882.00	Feb 010
26	AL-Saleh Health Center extension (Sanaa) 7-13-09	\$129,321.98	Oct 09
27	Bani Hewat renovations (Sanaa) 07-13-09	\$30,446.00	Feb 010
29	AL-Olofi.renovations (Sanaa)	\$108,824.00	Mar 010

Table 10: Building and renovations summary list (2006-2010)

The completion date quoted is 6 months after the actual work is completed and it is the date of the final payment of the contractors deposit against any defects noted within 6 months after delivery of the building.

Additional renovations were carried out that may be classified as repairs, addition of partitions etc... which were small interventions that did not require the same procedures used for larger tasks. There were far more demands for renovations that the project could not meet mainly due to budget limitations and delays in funding from USAID. In total BHS planned 84 interventions covering a total of 43 facilities or locations but completed only 51 of those interventions in 29 facilities or locations.

b. details of renovations

Governorate of <u>Marib</u>	1. Building accommodations for health services providers at the Majzar Rural Hospital
District	Majzar
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (two rooms + hall + kitchen + bathroom) & rehabilitation of water supply and sanitation.
Objective of the work	Build housing and rehabilitate the water supply and sanitation system
Total Cost (U.S. \$)	\$ 98,838.00



	2. Administration and Training Building, Health Services Providers Housing and Rehabilitation of the Maternity Department at the Shahid Hael Clinic
District	Marib City
Details of the Implemented Work	The building consists of two floors: the first has a training hall with annexes and administrative offices. The second has two apartments; each apartment consists of (two rooms + hall + kitchen + bath) & the maternity department includes two delivery rooms and a pre-and post-natal counseling room; as well as rehabilitation training rooms for other safe motherhood services
Objective of the work	Medghal health center needs administrative offices to free up space at the existing clinic for health care services. Two apartments were also provided for health care providers to enable the GHO to house a resident physician, a midwife and the rest of the service providers. The rehabilitation of the maternity department allows the provision of basic maternity services.
The Total Cost of the Work (U.S. \$)	\$ 219,876.50



	3. The Normal Delivery Building at Al Kara Rural Hospital
District	Marib Valley (Marib al-Wadi)
Details of the Implemented Work	The building consists of a delivery room, pre-and post-natal rooms + lounge + room for the doctor on shift duty + a room for the care of pregnant mother and child + 2 bathrooms.
Objective of the work	Make available an emergency obstetric service for deliveries.
The Total Cost of the Work (U.S. \$)	\$ 94,005.80



	4. Normal Delivery Building and rehabilitation of (the health service providers housing and the hospital) al Ratba Rural Hospital
District	Jabal Murad
Details of the Implemented Work	The building consists of a delivery room, pre-and post-natal rooms + lounge + 2 bathrooms & Rehabilitation that includes the service providers housing (2 apartments; each apartment consists of (two rooms + hall + kitchen + bath). The hospital was rehabilitated and linked to the normal delivery building.
Objective of the work	Provision of normal delivery facility to increase access to reproductive health services at the district. Two apartments were provided for the health care providers. The GHO provided a resident physician at the district and a midwife as well as the rest of service providers cadre and this is due to the availability of adequate housing. The rehabilitation of the hospital aims to bring it up to standards.
The Total Cost of the Work (U.S. \$)	\$ 108,760.00



	5. Modification and rehabilitation of the obstetric emergency and neonatal nursery department at the 26th Sept. Hospital
District	Al-Juba
Details of the Implemented Work	The work consists of renovating an operation room, a sterilization room, an admission room, 2 dressing rooms and a neonatal care room.
Objective of the work	The obstetric emergency service was added to the hospital and the GHO provided the appropriate medical staff to provide health services for complicated deliveries The nursery department was improved to house newborn care services.
Total Cost (U.S. \$)	\$ 25,457.80

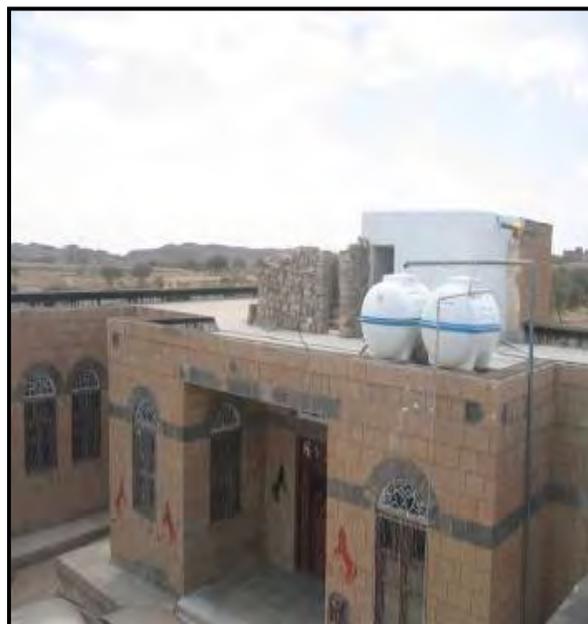


	6. Rehabilitation of al-Rahaba Health Center
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District	al-Rahaba
Details of the Implemented Work	Completion of rehabilitating the center and equipping the normal delivery department
Objective of the work	Rehabilitate the building to provide normal delivery and other maternal and child health services.
Total Cost (U.S. \$)	\$ 49,423.50



	7. Rehabilitation of Al-Abediah Rural Hospital
District	Al-Abediah
Details of the Implemented Work	Rehabilitation of the centre, the normal delivery unit and the hospital's water network
Objective of the work	Improve access to RH services
Total Cost (U.S. \$)	\$ 45,111.00



Projects Implemented in Shabwa

	1. Providers Housing at Nisab Hospital
District	Nisab
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (Two rooms + hall + kitchen + bathroom)
Objective of the work	Two apartments were provided for health care providers and therefore the GHO provided a resident physician at the district, a midwife and the rest of the service providers cadre. This is due to the availability of the adequate housing; and this increases the level of health services at the district.
Total Cost (U.S. \$)	\$ 100,419.40



	2. Health Services Providers Housing at al-Aqer Health Center
District	Markha al-Alia
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (Two rooms + hall + kitchen + bathroom)
Objective of the work	Two apartments were provided for health care providers and therefore the GHO provided a resident physician at the district, a midwife and the rest of the service providers cadre. This is due to the availability of the adequate housing; and this increases the level of health services at the district.
Total Cost (U.S. \$)	\$ 104,726.50



	3. Health Services Providers Housing at Dahar Health Center
District	Dahar
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (Two rooms + hall + kitchen + bathroom)
Objective of the work	Two apartments were provided for health care providers and therefore the GHO provided a resident physician at the district, a midwife and the rest of the service providers cadre. This is due to the availability of the adequate housing; and this increases the level of health services at the district.
Total Cost (U.S. \$)	\$ 115,857.50



	4. Rehabilitation Arma Rural Hospital and Starting a Department of Normal Delivery and Housing for Providers of Health Services
District	Arma
Details of the Implemented Work	Rehabilitating the hospital and re-operating it after it was not working and not providing services and starting a normal delivery department and building housing of 2 apartments (Each apartment consists of two rooms + hall + kitchen + bath). The maternity ward includes 2 rooms: one for delivery and a pre-and post-natal counseling room and rehabilitating rooms for safe motherhood services
Objective of the work	The GHO provided a resident physician, a midwife and the rest of the service providers cadre to the district due to the availability of the adequate housing. The rehabilitation of the maternity department aims to increase the provision of clean delivery services, and other maternal and child health and education services
Total Cost (U.S.\$)	\$ 219,529.00



Projects implemented in Amran Governorate

	1. Building Housing For Health Services Providers at Habourah-Thulimah Hospital
District	Habourah- Thulimah
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (Two rooms + hall + kitchen + bathroom)
Objective of the work	Two apartments were provided for health care providers and therefore the GHO provided a resident physician at the district, a midwife and the rest of the service providers cadre. This is due to the availability of the adequate housing; and this increases the level of health services at the district.
Total Cost (U.S. \$)	\$ 100,414.00



	2. Building Housing for Health Services Providers and a Building for the Normal Delivery at Suweer Health Center
District	Suweer
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (Two rooms + hall + kitchen + bathroom) and the delivery building that consist of a delivery room and a room for before and after delivery as well as a reception room. The center was linked to the delivery building
Objective of the work	To increase access to RH services at the district, particularly in the field of maternal and child health. Two apartments were provided for health care providers and therefore the GHO provided a resident physician at the district, a midwife and the rest of the service providers cadre. This is due to the availability of the adequate housing; and this increases the level of health services at the district.
Total Cost (U.S.\$)	\$ 148,840.00



	3. Completion of the Building Housing for Health Services Providers at Al Hussein al-Haeizi Health Center
District	Khamer
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (Two rooms + hall + kitchen + bathroom)
Objective of the work	Two apartments were provided for health care providers and therefore the GHO provided a resident physician at the district, a midwife and the rest of the service providers cadre. This is due to the availability of the adequate housing; and this increases the level of health services at the district.
Total Cost (U.S.\$)	\$ 50,012.00



	4. Rehabilitation of Eyal Yazeed rural Hospital and Starting a Normal Delivery Department and Building Housing for Health Services Providers
District	Serarah
Details of the Implemented Work	Rehabilitating the hospital and re-operating it after it was not working and not providing services and starting a normal delivery department and building housing of 2 apartments (each apartment consists of two rooms + hall + kitchen + bath). The maternity ward includes 2 rooms: one for delivery and a pre-and post-natal counseling room and rehabilitating rooms for safe motherhood services.
Objective of the work	To increase availability and quality of RH services, the hospital was rehabilitated. Two apartments were provided for the health care providers; therefore the GHO provided a resident physician, a midwife and the rest of the service providers cadre to the district due to the availability of the adequate housing.
Total Cost (U.S.\$)	\$ 197,026.00



	5. Rehabilitation of Thibain Rural Hospital and Starting a Normal Delivery Department and Building Housing for Health Services Providers
District	Thibain
Details of the Implemented Work	Rehabilitating the hospital and re-opening it after it was not working and not providing services and starting a normal delivery department and building housing of 8 apartments (Each apartment consists of two rooms + hall + kitchen + bath). The maternity ward includes 2 rooms: one for delivery and a pre-and post-natal counseling room and rehabilitating rooms for safe motherhood services
Objective of the work	Availability of housing aims to retain health service providers and sp the GHO provided a resident physician, a midwife and the rest of the service providers cadre to the district due to the availability of the adequate housing. This will increase the level of the health services at the district. The rehabilitation of the maternity department improves the provision of clean delivery services to reduce maternal mortality.
Total Cost (U.S.\$)	\$ 143,114.00



Projects implemented in the Governorate of Saada

	1. Rehabilitation of Al-Hashwah Rural Hospital and Starting a Normal Delivery Department and Building Housing for Health Services Providers
District	Al-Hashwah
Details of the Implemented Work	Rehabilitating the hospital and re-operating it after it was not working and not providing services and starting a normal delivery department and building housing of 2 apartments (Each apartment consists of two rooms + hall + kitchen + bath). The maternity ward includes 2 rooms: one for delivery and a pre-and post-natal counseling room and rehabilitating rooms for safe motherhood services
Objective of the work	Provide 2 apartments for the health service providers; therefore the GHO provided a resident physician, a midwife and the rest of the service providers cadre to the district due to the availability of the adequate housing. The rehabilitation of the maternity department will enable the provision of clean delivery services.
Total Cost (U.S.\$)	\$ 100,083.00



	2. Building Housing For Health Services Providers And Normal Delivery Building At Damaj Health Center
District	Al-Safra
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (Two rooms + hall + kitchen + bathroom) and the delivery building that consist of a delivery room and a room for before and after delivery as well as a reception room. The center was linked to the delivery building
Objective of the work	Provide clean delivery services and increase health services at the district, particularly in the field of maternal and child health and health education. Two apartments were provided for health care providers and therefore the GHO provided a resident physician at the district, a midwife and the rest of the service providers cadre. This is due to the availability of the adequate housing; and this increases the level of health services at the district.
Total Cost (U.S.\$)	\$ 132,995.00



	3. Building Housing For Health Services Providers And Normal Delivery Building At Bani Awar Health Center
District	Sahar (Bani Awar HC)
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (Two rooms + hall + kitchen + bathroom) and the delivery building that consist of a delivery room and a room for before and after delivery as well as a reception room. The center was linked to the delivery building
Objective of the work	Make available clean delivery services to increase access to health services at the district, particularly in the field of maternal and child health and health education. Two apartments were provided for health care providers and therefore the GHO provided a resident physician at the district, a midwife and the rest of the service providers cadre. This is due to the availability of the adequate housing; and this increases the level of health services at the district.
Total Cost (U.S.\$)	\$ 188,674.60



	3. Building Housing For Health Services Providers And Normal Delivery Building At al-Mashnaq Health Center
District	Shada'a
Details of the Implemented Work	The building consists of 2 residential apartments; each apartment consists of (Two rooms + hall + kitchen + bathroom) and the delivery building that consist of a delivery room and a room for before and after delivery as well as a reception room. The center was linked to the delivery building
Objective of the work	Make available clean delivery services to increase access to health services at the district, particularly in the field of maternal and child health and health education. Two apartments were provided for health care providers and therefore the GHO provided a resident physician at the district, a midwife and the rest of the service providers cadre. This is due to the availability of the adequate housing; and this increases the level of health services at the district.
Total Cost (U.S.\$)	\$ 174,961.00



	5. Building Housing For Health Services Providers (2 nd floor) and Repairing the Drainage Network of the Razeh Hospital
District	Razeh
Details of the Implemented Work	Rehabilitation of the sewerage network in the hospital and re-operating the hospital as well as adding residential apartments (each apartment consists of two rooms + hall + kitchen + bathroom)
Objective of the work	Improve the hospital health services, provide housing for the health care providers; therefore the GHO provided a resident physician, a midwife and the rest of the service providers cadre to the district due to the availability of the adequate housing. This increases the level of the health services at the district.
Cost (U.S. \$)	\$ 91,991.00



Projects in Al-Jawf Governorate

	1. Modification work and the additions at Al-Hazm Center for motherhood and childhood services
District	Al-Hazm
Details of the Implemented Work	Rehabilitating the Health Center and restarting it after it was not working and not providing services and starting a normal delivery department and a two-maternity rooms and a pre-and post-natal counseling room, as well as rehabilitation other rooms for the safe motherhood services and rehabilitation of building housing for residential apartments (each apartment consists of two rooms + hall + kitchen + bath).
Objective of the work	Rehabilitating the maternity department will lead to the provision of clean delivery services and increasing the health services at the district, particularly in the field of maternal and child health and health education. The rehabilitation of two apartments for health care providers will retain health providers. Therefore the GHO provided a resident physician, a midwife and the rest of the service providers cadre to the district and this is due to the availability of the adequate housing.
Cost of the Work (U.S. \$)	\$ 12,985.00



	2. Alterations at the Medical Delivery Department at the Khalq Health Center
District	Khalq
Details of the Implemented Work	Restarting the maternity department, a pre-and post-natal counseling room and rehabilitating rooms for safe motherhood services.
Objective of the work	The rehabilitation of the maternity department will lead to the provision of clean delivery services, which leads to increasing the level of the health services at the district, especially in the field of maternal and child health and health education.
Total Cost (U.S. \$)	\$ 4,461.00



Projects Implemented in the Governorate of Taiz

	Modification Work and the Additions at Al-Thawra Health Center
District	Al- Selw
Details of the Implemented Work	Rehabilitation of the health center (built with USG funds) after it was unused for a long time due to needed modifications. Establish a section for normal delivery, repair the X-ray room and the pre-and post-natal room as well as rehabilitation of other rooms for safe motherhood services and adding a room for the newborn.
Objective of the work	The health center was built by the US Embassy civilian affairs and needed modifications, equipment and training of its staff.
Total Cost (U.S.\$)	\$ 20,857.00



Projects Implemented at Sana'a City

	1. The Normal Delivery Building at al-Saleh Health Complex
District	Al-Sabeen
Details of the Implemented Work	The Normal Delivery Building consists of 2 delivery rooms, pre-and post-natal rooms + lounge + room for the doctor on shift duty + a counseling room and the complex was linked with the Normal Delivery Building.
Objective of the work	To improve the provision of clean delivery services and increase the health services at the district, particularly in the field of maternal and child health and health education.
Total Cost (U.S. \$)	\$ 133.810 0.00



	2. Rehabilitation Of The Normal Delivery Department And Safe Motherhood Services At Azal Hospital
District	Azal
Details of the Implemented Work	Rehabilitating of the delivery department that consists of 2 rooms and a pre-and post-natal room, lounge + counseling room and a room for the doctor on shift duty as well as rooms for safe motherhood provisions and the Department was separated from the rest of the hospital and it was likened with the emergency building that was built recently.
Objective of the work	Improve the provision of clean delivery services and of the health services at the district, particularly in the field of maternal and child health and health education.
Total Cost (U.S.\$)	\$ 20,478.5 0



	3. Rehabilitation Of The Normal Delivery Department And Safe Motherhood Services At Bani Hawat Hospital
District	Bani Hawat
Details of the Implemented Work	Rehabilitating of the delivery department that consists of 2 rooms and a pre-and post-natal room, lounge + counseling room as well as rooms for safe motherhood provisions and the Department was separated from the rest of the hospital.
Objective of the work	Improve the provision of clean delivery services and of health services at the district, particularly in the field of maternal and child health and health education.
Total Cost (U.S.\$)	\$ 39,476.00



	4. Rehabilitation of the maternity and childhood building at the center of Qaa al-Ulofi
District	Al-Tahrir
Details of the Implemented Work	Rehabilitation of two floors of a building built by the government which stayed idle for more than three years. The building was renovated to serve as a normal delivery unit. This department includes 2 rooms for delivery and a pre-and post-natal counseling room as wells as an incubation. Also the rehabilitation of all the other rooms devoted for safe motherhood services.
Objective of the work	Rehabilitating the maternity department will enable the provision of clean delivery services. This will increase access to health services at the district, particularly in the field of maternal and child health and health education.
Total Cost (U.S.\$)	\$ 112,089.00



2. Equipment acquisition and distribution

The BHS project had two main equipment procurement orders, one in each of its two phases. Normally each procurement took the best part of a full year to be completed due to the lengthy process of needs assessments, working on final specifications, tendering and selection process then obtaining necessary USAID waivers and approvals, the importation of the goods and their final warehousing and distribution. The distribution itself needed to be coordinated with the completion of repairs and renovations for the facilities where the equipment was going and with the placement of additional medical staff if needed by the MOPHP. Furthermore, with the degradation of security in most of the targeted governorates, the planning and implementation of field visits became a very risky matter especially for vehicles carrying merchandise which need government or tribal authorities to ensure safe passage.

EQUIPMENT DISTRIBUTION BY the BHS Project (2006-2010)

Type of Clinic Equipment: ND=Normal delivery; MP&Lab = medical diagnosis & laboratory package; O = Operation theater ; Lab; Ed = education; G = other

Governorate	District	Health Facility name	Power Generator (date)	Type of Clinic Equipment	DELIVERED			Total of interventions	
					Equipment delivered (date)	Counseling Room (date)	Furniture delivered (date)		
Amran	Al Asha	Al Asha Health Center		G	11-Sep-07		26-Apr-08	2	
	Al Gafla	Al Gafla Rural Hospital		OT	13-Jun-07		27-Apr-08	2	
	Shahara	Shaharah Health Center					8-Sep-09	28-Jul-09	2
		Al Hajr Health Center		MP&Lab	21-Sep-10	15-Feb-10			3
				MP	4-Oct-10				
	Al Qabeei Health Center						15-Mar-10	1	
	Iyal soreeh	Amd Health Unit			G	11-Sep-07			1
		Bin Alzubir Health Unit			G	11-Sep-07			1
		Bani Qadem Health Unit			G	10-Dec-07			1
		Sahab Health Center		MP&Lab	21-Sep-10	1-Sep-09			4
				ND&Em OC	4-Oct-10				
		MP	21-Oct-10						
	Maswar	Maswar Rural			MP&Lab	18-Aug-08	7-Sep-09	19-Jul-09	4

	Hospital		MP	11-Nov-10			
Khamer	Alhaizi Health Center		G	21-Aug-07			1
	Alhayah Health Unit		G	9-Sep-07			1
	Aljeraf Health Unit		G	9-Sep-07			1
	Qasabah Health Unit		G	9-Sep-07			1
	Al-Salam Hospital		NICU	21-Jan-08			1
Habour Dhulima	Habour health center					1-Jul-07	1
Thula	Thulla Health Center					21-May-08	1
	Hababa Health Center		MP	11-Nov-10			1
Raydah	Sakan Health Unit		G	21-Aug-07			1
	Raydah Health Center		MP&Lab	21-Sep-10	3-Sep-09		4
			MP	4-Oct-10			
		MP	11-Nov-10				
Jabal Iyal Yazid	Al Seraraha Health center		Mp&Lab /G/	7-Jul-08	5-Sep-09	22-Jul-07	4
			ND	6-Aug-2008			
	Bait thaib Health Unit		G	21-Aug-07			1
Kharef	Kharef Rural Hospital		G	9-Sep-07		20-Jul-09	3
			Mp&Lab	25-Feb-08			
	Bait zawd Health Center		G	21-Aug-07			1
	Al Jaledi Health Unit		G	10-Dec-07			1
Huth	Huth Health Center		G	11-Sep-07		18-May-08	3
			MP&Lab	22-Jan-08			
	Khaiwan Health Unit		G	11-Sep-07			1
Al Sawd	Al Sawd Health Center	21-Jul-09	G	10-Sep-07	6-Sep-09	21-Jul-09	6
			MP&Lab	2-Feb-09			
	MP		4-Oct-10				
	Yemen Women Union					10-Dec-08	1
Beni Sureem	Sanaahnih Health Center		G	21-Aug-07	2-Sep-09		4
			MP&Lab	19-May-08			

			MP	11-Nov-10				
	Wadaah Health Center		G	21-Aug-07			1	
	Damaj Health Unit		MP	11-Nov-10			1	
Thebeen	Thebeen Rural Hospital		Mp&Lab	24-Feb-08	15-Mar-10	2-Aug-07	3	
	Iyal Qassem Health Unit		G	10-Dec-07			1	
	Marhabah Health Center				15-Mar-10		1	
	Al Shatbah Health Unit				15-Mar-10		1	
Soweer	Soweer Health Unit	28-Nov-07	ND	28-Nov-07		28-Nov-07	4	
			MP&Lab	19-Aug-08				
Al Soodah	Alsoodah Health Center		MP&Lab	21-Sep-10			1	
	Yemen Women Union					10-Dec-08	1	
Amran city	High institute for medical sciences		Ed&Lab	25-Jul-07			1	
	Amran General Hospital		NICU&ND	19-Jan-10			3	
			NICU	10-Jul-10				
			MP	11-Nov-10				
	Red Crescent Health Center		Mp&Lab	21-Jan-08			1	
	Halamlam Health Unit		G	10-Sep-07			1	
	Yemen Women Union					10-Dec-08	1	
	Bait Al Naqeeb Health Center				15-Feb-10		1	
	Al Jannat Health Unit				15-Feb-10		1	
	Mother and child center- Chairty and Social Associate		ND	20-Oct-10			1	
	Al Osrah Health Center					15-Mar-10	1	
	Amran Health Office		27-Jul-07	MT Eq + veh	27-Jul-07			9
				Ed	15-Dec-08			
		27-Jul-07	MT Eq + veh	12-Jun-10				
		8-Dec-10	2 MP for health school MMT	8-Dec-10				

				Car				
Totals for Amran	# HF's (44)	6	57	57	13	17	93	
Sa'ada	Al Hashwa	Amlah Noman Health Center		MP&Lab	13-Apr-08		13-Aug-07	2
	Al Safra	Demaj Health Center	11-Aug-07	ND	4-Feb-08		11-Aug-07	4
				MP&Lab	13-Apr-2008			
	Dhaher	Al-Malaheedh Rural Hospital		MP&Lab	13-Apr-08			1
	Baqem	Baqim Rural Hospital		MP&Lab	4-Feb-09			1
	Haidan	Haidan Hospital		MP&Lab	13-Apr-08			1
	Razeh	Razih Rural Hospital		MP&Lab	13-Apr-08		24-Aug-07	2
	Sahar	Estern Beni Oweer Health Center	14-Feb-08	ND&MP	14-Feb-08		14-Feb-08	4
				MP&Lab	13-Apr-08			
	Shada	Al-Mashnaq Health Center	24-Aug-07	ND	6-Feb-08		24-Aug-07	4
				MP&Lab	13-Apr-08			
	Ghamer	Ghamer Health Center		MP&Lab	13-Apr-08			1
	Majz	Majz Health Center		MP&Lab	13-Apr-08			1
	Manabeh	Manabeh Rural Hospital		MP&Lab	13-Apr-08			1
Sa'ada city	Aljumhori Hospital		OT&US &ND&N ICU	2-Sep-10			2	
			MP	6-Oct-10				
	High institute for medical scince		Ed&Lab	25-Jul-07			1	
Sa'ada Health Office		27-Jul-07	2 MT Eq + 2 veh	27-Jul-07			6	
		15-Dec-08	1 MT Eq +1 veh	15-Dec-08				
Totals for Saada	# HF's (12)	6	20	20	0	5	31	
Shabwa	Markha Alulya	Al-Aqer Health Center	11-Sep-07	MP	12-Oct-10		11-Sep-07	3

Nisab	Nisab Mother and Child Health Center		G	15-Jan-08	13-Aug-09	21-Jun-07	3
	Al Jafr Health Unit		G	15-Jan-08			1
	Al Salbah Health Unit		G	15-Jan-08			1
	Al Hanak Health Unit		G	15-Jan-08			1
	(amzambaiya)Amkadah Health Unit		G	15-Jan-08			1
	Al-Ribat Aldini		G	25-Aug-08	5-May-10		2
	jubah health unit				2-May-10		1
Jardan	Ayath Health Unit		G	16-Jan-08			1
	Jardan Rural Hospital		G	16-Jan-08	11-Aug-09		2
Ataq	Al Shabeekah Health Unit		G	16-Jan-08			1
	Nawkhan Health Unit		G	16-Jan-08			1
	Qura Aal Mahdi Health Unit		G	16-Jan-08			1
	High institute for medical sciences		Ed&Lab	25-Jul-07			1
	Al-Ribat Aldini		G	9-Nov-09	2-May-10		2
	Red Crescent Health Center		MP	12-Oct-10			1
Assaeed	Al Sefal Health Unit		G	14-Jan-08			1
	Maqbelah Health Center		G	14-Jan-08			1
	Al Musaina'ah Hospital		G	16-Jan-08	3-May-10		2
	Jamal Abdul Nasser Hospital		OT/NIUC	10-Oct-10	10-Aug-09		3
			MP	14-Oct-10			
Arama	Armah Hospital		ND	14-May-08	11-Aug-09	20-Apr-08	3
Dohr	Rayhoon Health Center	13-Dec-07	MP	12-Oct-10		13-Dec-07	3
Al Talh	Al Talh Health Center				15-Aug-09		1
Rawdha	Al Rawdah Health Unit	16-Jan-08	G	16-Jan-08			2
	Ghareer Al Ghail Health Center		G	16-Jan-08			1
Habban	Huda Health Center		G	14-Jan-08			1

		Lahiah Health Center		G	14-Jan-08			1	
		Habban Health Unit		G	14-Jan-08			1	
		Al Khabar Health Unit		G	15-Jan-08			1	
	Mayfaa	Azzan Hospital		MP	12-Oct-10	12-Aug-09		3	
				OT/NIC U	13-Oct-10				
	Osailan	Osailan Hospital				4-May-10		1	
	Markha Alsufra	Khawra Health Center		MP	12-Oct-10			1	
	Ataq	Governorate Health Office	27-Jul-10	MT eq.+ veh	27-Jul-07			7	
				Ed	15-Dec-08				
			12-Jun-10	MT eq.+ veh	12-Jun-10				
			8-Dec-10	MT eq.+ veh	8-Dec-10				
	Totals for Shabwa	# HF's (31)	6	35	35	11	4	56	
Marib	Mejzar	7 July Hospital		G	5-Nov-07	18-Aug-09	11-Jun-07	3	
		Al Sahari Health Unit		G	5-Nov-07			1	
	Raghw an	Asdas Health Center		MP	8-Oct-10		22-Jul-08	3	
				MP	5-Nov-10				
			Raghw an Health Center		MP	6-Dec-10			1
	Medgh al	Al -almzrak health unit		MP	6-Dec-10	28-Feb-10			2
		Medghal Rural Hospital		MP	6-Dec-10				1
	Harib Al Karami sh	Harib Al Karamish Health Center		MP&Lab	5-Jul-08	19-Aug-09	12-Jul-06	3	
	Bidbida h	Hazm Almaqareet		MP&Lab	8-Oct-10	19-Aug-09			2
		Badbada Rural Hospital		MP	2-Oct-10				1
	Sirwah	AL-mahjazah Rural Hospital					17-Aug-09	16-Aug-09	2
		Al Zoor Health Center		G	7-Nov-07				1
		Al Hajlan Health Center	23-Dec-	MP	6-Dec-10				2

		10					
Jubah	26 Sep. Hospital		OT	20-Jun-07		21-Oct-08	3
			MP&Lab	8-Oct-10			
	Yaarah Health Unit		G	7-Nov-07	28-Feb-10		3
			MP	6-Dec-10			
	May 22 Hospital		G	7-Nov-07			1
	AL khaithlah Health Center	23-Dec-10	MP	6-Dec-10	28-Feb-10		3
	Al Jubah Health Center		MP	5-Nov-10			1
Naja'a Health Unit		G	7-Nov-07	28-Feb-10		2	
Rahabah	Rahbah Health Center	13-Jul-08	ND	13-Jul-08		13-Jul-08	5
			Mp&lab	13-Jun-10			
			MP	6-Dec-10			
Mothrah Health Center	23-Dec-10					1	
Mahilyah	Al-Amood Health Center		MP&Lab	11-Aug-08		11-Aug-08	2
	Qaniah Health Center	23-Dec-10					1
Alabdiyah	Aal Aba Algaith Health Center				20-Aug-09		1
Marib Al Madina	Alshaheed M.Ha'il center					13-Nov-07	1
	Maneen Al Hadad Health Unit		G	7-Nov-07			1
	Al-wash Health Center				28-Feb-10		1
Marib Al Wadi	Al Kara Hospital		ND	19-Nov-07		23-Mar-10	2
	Al Taheel Health Unit	23-Dec-10	G	6-Nov-07			3
			MP	6-Dec-10			
	Al Saqet Health Unit		G	6-Nov-07			1
	Al Lahqah Health Unit		G	6-Nov-07			1
Al Hosoon Hospital			G	6-Nov-07	18-Aug-09	23-Mar-10	4
			MP	6-Dec-10			
Jabal Murad	Jabal Murad Hospital		ND	20-Nov-07		18-Jun-07	2

		Al maood Health Center				28-Feb-10		1	
	Marib City	High Institute for Medical Science		Ed	25-Jul-07			1	
		Governorate Health Office	27-Jul-07	2 MT Eq + 2 veh	27-Jul-07			10	
				Ed	15-Dec-08				
				RH car	15-Dec-08				
			8-Dec-10	2MT eq.+ 2veh	8-Dec-10				
Totals for Marib		# HF's (33)	10	40	40	12	11	73	
Aljawf	Alhazm	Governorate Health Office	25-Jul-07	2 MT Eq + 2 veh	25-Jul-07			5	
				Ed	15-Dec-08				
Totals for Al-Jawf			2	3	3	0	0	5	
Taiz	Al Solw	Al-Thwra Health Center	7-Mar-07	MP	21-Feb-07		12-Feb-07	4	
				MP	22-Jul-07				
Total Taiz		# HF (1)	1	2	2	0	1	4	
Sana'a City		Al Sabaeen Hospital		G	6-Apr-08			3	
				MP	5-Aug-08				
				MP	24-Oct-10				
		Alsabeen	alsaleh health center		ND+Mp	17-Apr-10	17-Apr-10		3
					MP	23-Oct-10			
			Al Zahrawi Health Center		G &MP	31-Aug-10			1
			Alshaheed Alhafi Health Center		G	8-Sep-10			1
			Thai Yazan Health Center		G	8-Sep-10			1
	Old Sana'a	AL-Zubiry Hospital			OT	4-Apr-09			2
					MP	24-Aug-09			
A'azal	Azal health			ND	28-Oct-09	28-Oct-09		3	

		Center		Mp	30-May-10				
	Bani Alhareth	Bani Hwat Health Center		ND+Mp	31-Mar-10	31-Mar-10		2	
	Shoub	YFCA		NICU+Mp	25-May-10			1	
	Altahreer	High institute for medical sciences		ED	21-Jun-09			1	
		Red Crescent Health Center		G	10-Oct-10			2	
				Mp&Lab	7-Jun-10				
		alolwfi health center		ND+Mp	27-Apr-10	27-Apr-10		2	
		Kuwait Hopsital		NICU+Mp	23-Oct-10			1	
		Ala'alaia Health Center		G	8-Sep-10			1	
	Maeen	Alsunainah Health Center		G	8-Sep-10			1	
		Health Office Sana'a		ED	15-Dec-08			4	
			12-Jun-10	MT eq +Veh	12-Jun-10				
			RH car	8-Dec-10					
	Total Sana'a	# HF's (14)	1	24	24	4	0	29	
	Aden	Alshigh Othman				2-Oct-10		1	
		Altwahi	Altwahi Health Center				2-Oct-10		1
		Almnso rah	Hashed health center				2-Oct-10		1
		Alburaiqa	Alburaiqa Health Center				2-Oct-10		1
				Beer Ahmed Health Center				2-Oct-10	
	Total Aden	# HF's (5)	0	0	0	5	0	5	
	Lahj	Alhuta				9-Oct-10		1	
		Radfan	Radfan health center				9-Oct-10		1
		Toor Albaha h	Toor Albaah Hospital				9-Oct-10		1
		Yafe'a	October Hospital				9-Oct-10		1
		Halmeen	Halmeen Hospital				9-Oct-10		1

	Al Madari bah Wa Al Arah	Kharaz Health Center				9-Oct-10		1	
Total Lahj		# HF's (6)	0	0	0	6	0	6	
Total interventions		# HF's (146)	32	181	181	51	38	302	
Governorate	District	Health Facility name	DELIVERED						Total of interventions
			Power Generator (date)	Type of Clinic Equipment	Equipment delivered (date)	Counseling Room (date)	Furniture delivered (date)		

Table 11: Equipment procured and distributed by BHS (2006-2010)

3. Training of health personnel: pre-service training

Number of midwives enrolled in pre-service training (2006-2010) who graduated as community midwives

Year	Midwives in Pre Service Training	Notes
2006	141 Graduated	Training started in 2005 under the previous USAID Catalyst project and under ADRA project
2007	240 enrolled and started training	
2009	203 graduated	
Total	344 graduated	A higher number enrolled at the start for each of the governorates but some dropped out from the training.

Table 12: Numbers of midwives in the pre-service training for midwives supported by BHS

4. Training of providers in MCH/FP in short term training

The quality of the training courses and materials offered to various health providers for FP, MH and Child health has been as important if not more as meeting the target numbers in this area.

- BHS training manuals and training packages covered the following areas:
 - 1) Technical skills for midwives
 - 2) Clean delivery by midwives in home based births
 - 3) Mobile teams services
 - 4) Balanced counseling

- 5) Best Practices training manual for hospital staff
 - 6) Best Practices training manual for midwives at end of pre-service
 - 7) Best Practices training manual and curriculum for midwives and nurses in pre service training
 - 8) Training of community educators for safe age of marriage
 - 9) Religious leaders (TOT)
 - 10) Religious leaders (rollout)
 - 11) Mapping skills for midwives
 - 12) Business skills for midwives
 - 13) Clinical skills for health providers
 - 14) Community health education manual and training guide
 - 15) Referral guidelines and training manual
 - 16) Updates in contraceptive technology (based on Green Handbook)
 - 17) Essential obstetric care training manual
 - 18) Training of health facilities service statistics officers
- Health Institutes in the governorates and in Sanaa have been provided with state of the art teaching models for demonstration and hands on training (Zoe models)
 - Health offices have been provided with one training equipment package each that includes a computer, a projector, screen and other related office equipment.
 - BHS always trained trainers and involved them in subsequent propagation of training to additional staff.
 - Training design included the use of the participatory approach, case studies and hands on training; training events always included pre-post tests and final evaluations.
 - The selection of trainers is made from a list of approved and triaged trainers. BHS conducted training using local resources from MOPHP, University and a pool of providers and consultants.
 - All training is conducted in Arabic language and all materials are also in Arabic language. Every training activity has a prepared curriculum and is overseen by a trainer who is often a BHS staff trained in applying participatory methods. Most guest lecturers make presentations using audiovisual materials and demonstrations and BHS trainers require that these presentations are sent ahead of time to the BHS training coordinator for monitoring the quality.
 - BHS set up a training facility at its Sanaa office location, which has been used extensively to house training activities, saving resources that otherwise go toward renting venues, reducing transportation costs as well as security issues, and providing a more consistent support to training activities from BHS staff. USAID and the US Embassy and USG projects regularly made use of this facility as well.

The numbers of health providers trained per year were as follows:

Year	Number trained	Notes
2006	423	Numbers do not include personnel in pre service training
2007	595	

2008	538	
2009	744	
2010	1812	
Totals	4112	Some staff may be trained more than once during the project period, figures also include staff trained from governorates outside of USAID target areas (supported by ESD under the Best Practices scaling up)

Table 12: number of health providers trained

5. Scaling Up Best Practices in PP/PAC (all QR)

In 2009, BHS trained 327 health providers from 6 major hospitals on scaling up of Best Practices. In 2010, a total of 1329 providers were trained who came from up health facilities from all governorates as shown in the following summary schedule.

Description	Phase I	Phase II	Phase III	Phase IV	Total
Best Practices introduced	5	6	8	8	8
Improvement Collaborative formed/ Health Facility team	0	1	1	13	15
Health facilities included					
Governorate Hospitals (Comprehensive EmOC – reference hospitals)					
Amran (*)			1	1	1
Al Jawf (*)			0	0	0
Marib (*)			3	3	3
Sa'ada (*)		1	1	1	2
Shabwa (*)			3	1	3
Sana'a Al Amana (*)	1		1	1	1
Taiz		1		1	2
Ibb		1		1	2
Lahej		1		1	2
Aden		1		2	3
Sana'a Governorate				1	0
Hajja				1	1
Hodeida				1	1
Hadhramout Sahel				1	1
Hadhramout Al wadi				1	1
Mahra				1	1
Dhamar				1	1
Baidha				1	1
Rayma				1	1
Mahweet				1	1
Abyan				1	1
Al Dhale'a				1	1
Socotra				0	0
subtotal	1	5	9	24	30
Rural District Hospitals (Basic / normal deliveries/ EmOC- referral)					
Amran			15	1	15

Al Jawf			2	2	2
Marib			11	2	11
Sa'ada			10	3	10
Shabwa			12	4	12
Sana'a Al Amana			1	1	1
Taiz				3	3
Ibb				6	6
Lahej				4	5
Aden				0	0
Sana'a Governorate				2	3
Hajja				0	1
Hodeida				1	1
Hadhrumout Sahel				2	2
Hadhrumout Al wadi				2	2
Mahra				1	0
Dhamar				1	1
Baidha				0	1
Rayma				2	2
Mahweet				2	2
Abyan				1	1
Al Dhale'a				1	1
Socotra				1	1
Subtotal	0	0	51	42	83
District Health Centers (normal deliveries – referral)					
Amran			30	3	30
Al Jawf			6	3	6
Marib			11	0	11
Sa'ada			16	0	16
Shabwa			12	0	12
Sana'a Al Amana			4	4	4
Taiz				1	1
Ibb				0	0
Lahej				1	1
Aden				4	4
Sana'a Governorate				0	0
Hajja				2	3
Hodeida				1	1
Hadhrumout Sahel				1	1
Hadhrumout Al wadi				0	0
Mahra				1	2
Dhamar				1	1
Baidha				1	1
Rayma				0	0
Mahweet				0	0
Abyan				1	1
Al Dhale'a				1	1
Socotra				2	2
Subtotal	0	0	79	27	98
Totals for all three categories	Phase I	Phase II	Phase III	Phase IV	TOTAL
	1	5	139	93	211

Table 13: Summary of Phases I-IV targets for Best Practices scale up

(*) The five governorates included in Phase III plus Sana'a capital are also participating in phase IV and are expected to add another 5 facilities each, which are reflected in the training numbers but since all their eligible facilities were already included in phase III (still in process) their numbers are not added again in phase IV. When the total on the far right column does not add up it is because the same facility is listed in more than one of the columns to the left.

Governorate	Governorate/ or referral Hospital	District hospital	District health center	Total facilities
1. Amran	1	1	3	5
2. Al Jawf	0	2	3	5
3. Marib	3	2	0	5
4. Sa'ada	1	3	0	4
5. Shabwa	1	5	0	6
6. Sana'a Al Amana	1	1	4	6
7. Taiz	1	3	1	5
8. Ibb	1	6	0	7
9. Lahej	1	4	1	6
10. Aden	2	0	4	6
11. Sana'a Governorate	1	2	0	3
12. Hajja	1	0	2	3
13. Hodeida	1	1	1	3
14. Hadhramout Sahel	1	2	1	4
15. Hadhramout Al	1	2	0	3
16. Mahra	1	1	1	3
17. Dhamar	1	1	1	3
18. Baidha	1	0	1	2
19. Rayma	1	2	0	3
20. Mahweet	1	2	0	3
21. Abyan	1	1	1	3
22. Al Dhale'a	1	1	1	3
23. Socotra	0	1	2	3
Subtotals	24	43	27	94

Table 15: Number and location of health facilities targeted in Phase IV by governorate and category

By the end of the BHS project, the BPs were introduced in at least 3 health facilities in each governorate in Yemen (except one) and the scale up is scheduled to continue under the MOPHP leadership with support from Pathfinder International/ Yemen through the ESD project (until April 2011).

BHS received reports from participating hospitals on the services they provided as part of the Best Practices. The figures show that about 50,000 deliveries took place since the program started in these facilities, and the mothers who delivered benefited from these added services that the BO program introduced especially postpartum care.

Scaling up best practices in MNCH/FP	2009	2010
# of health facilities where best practices in MNCH/FP are introduced through USG supported program	7	89
# of new BPs introduced	8	8
<i>Number of deliveries</i>	11,623	39,165

<i>Number of women counseled on exclusive breastfeeding</i>	5,188	25,813	
<i>Number of women counseled on Kangaroo Mother Care</i>	312	1,806	
<i>Number of women who had miscarriage (abortion)</i>	915	3,485	
Child health	2009	2010	Total
Newborns receiving BCG vaccination before discharge from the hospital	1,006	5,692	6,698
Newborns receiving polio vaccination before discharge from the hospital	3,974	13,010	16,984
Mothers receiving Vitamin A before discharge from the hospital	7,004	21,068	31,563

Table 15a: services provided by health facilities participating in the BP program.

Part of phases III and IV of the BP project included revision of the Health Institute midwifery curriculum to incorporate the BP in it. The BP curriculum for midwifery covering 8 BPs plus two more (Partograph and AMTSL) was completed, reviewed by teaching staff and approved. Using the new curriculum, BHS staff and the Sanaa and Aden institutes trained 39 teachers representing all 16 health institutes in the country

Number of instructors in health institutes trained in BPs using the pre-service trainer manual:

Gov.	Instructors
Ibb	3
Sana'a City	5
Taiz	4
Hajja	3
Dhamar	1
Sana'a	1
Almahwait	3
Amran	1
Abyan	2
Albayda'a	2
Hadhramout	3
Shabwa	2
Aden	4
Lahj	2
Almahara	1
Aldhale'a	2
Total	39

6. Mobile team services

Governorate	2005, baseline	2006-2008	2009-2010
Al Jawf	0	2	2
Amran	1	2	5(*)
Marib	1	3	5(*)
Saada	0	3	3

Shabwa	1	2	4(*)
Sanaa	0	0	1
Total	3	12	20(*)

Table 16: Number of teams established, per governorate

(*) the total includes 4 mobile teams equipped through US Embassy support (CMSE) 1 for each of Marib and Shabwa and 2 for Amran to provide school health services.

The mobile teams services provided comprehensive services to clients in the six governorates where they operated. Service statistics were as follows:

Mobile team services	2005, baseline	2006-2008	2009	2010
Total	22,576	183,726 (average of 61,242 per year)	130,694	160,590

Table 16a: Services provided by Mobile Teams during the project duration

Types of services provided by Mobile Teams	2009	2010
Mobile medical teams		
# of service contacts provided by mobile teams, by type of service	130,694	160,590
<i>General exam</i>	50,890	57,236
<i>ANC</i>	8,061	9,429
<i>PPC</i>	334	148
<i>Assisted delivery</i>	88	163
<i>FP</i>	4,985	8,640
<i>child health</i>	-	-
<i>immunization</i>	13,444	12,258
<i>education/ counseling</i>	30,522	42,786
<i>Referral</i>	788	901
<i>ECG and US</i>	11,735	14,905
<i>Other (blood tests)</i>	9,847	14,124

Table 16b: Types of medical services offered by Mobile teams

7. Community Midwives in private practice

BHS established 12 midwives in their private practice in 2009 and added another 56 midwives in the last quarter of 2010 who would start their services by the end of 2010 or early 2011.

Private Midwives clinics (services from 12 midwives established in 2009-2010)	2009	2010	Total

# of clients served	-	4,410	4,410
# of client visits, by type	6,522	6,519	13,041
<i>Family planning</i>	1,063	1,329	2,392
<i># of deliveries attended by YMA midwives</i>	1,877	1,638	3,515
<i>prenatal visits</i>	1,282	1,445	2,727
<i>postnatal care visits</i>	58	216	274
<i>newborn care</i>	1,877	1,638	3,515
<i>home visit</i>	174	216	390
<i>health education</i>	98	37	135
<i>Immunization</i>	59	-	59
<i>Other</i>	34	-	34

Table 17: Community midwives services

The 2010 reports do not include December statistics and one midwife from Saada did not work in Q1 of that year).

8. Community mobilization and health education:

a. Religious leaders

A total of 146 religious leaders from 6 target governorates were trained in 2007 and 2008 and were involved in disseminating information and educating their audiences about various health issues including RH/FP. Their involvement consisted in using their Friday sermons to integrate selected messages and in organizing community events to preach and raise awareness and to spread the message that they and the religion they represent are in favor of the behaviors that BHS and the MOPHP are promoting.

	2005, baseline	2006-2008	2009	2010
Religious leaders trained	0	146	37	16
Events organized	0	4437	5718	5126
People reached	0	419147	644,413	362,512(*)

Table 18: Number of religious leaders trained and number of events organized and people reached

The number of people reached has decreased in 2010 compared to 2009 due to governorates not reporting, especially for quarter 4 in addition to decreased numbers reported in most governorates: Marib from 88,466 in 2009 to 47,891 in 2010; Amran 168,276 to 69,790; Shabwa 197,866 to 138,610; Al jawf 37,754 down to 27,776 and Sanaa 152,051 down to 68,445. Part of the reason is the project winding down in preparation for closing, with less additional training

conducted to reenergize current participants in the program or to replace religious leaders who dropped out or are no longer reporting.

b. Community Mobilization Groups and volunteers

This activity is based on having one community mobilization group (CMG) established in each of the target governorates (not in Sanaa) and conducting community education events. The totals for their events and numbers of people reached were as follows:

	2005, baseline	2006-2008	2009	2010
Groups	0	5	5	5
Events organized	0	2895	3004	3361
People reached	0	118938	110287	118470

Table 19: Number of CMGs formed and trained and number of events organized and people reached

As of 2009, BHS started training community volunteers on the use of the community health education manual and these in turn held community events to educate the public about the health issues covered in the manual.

Community health education	Events	Men	Women	Total
2009	18,223	72,656	209,574	282,230
2010	28,150	113,420	361,027	474,447
Totals	46,373	186,076	570,601	756,677

Table 20: Community education meetings and people reached

c. Health education and counseling

The main interventions under this activity are to help health facilities to set up a dedicated room for counseling and health education on their premises where they would provide counseling and health classes and to train health staff to provide counseling. In addition BHS coordinators in the governorates regularly organized meetings in health facilities or in the community to provide health education information. The two tables below provide information on each of these activities.

Counseling rooms:

	2005, baseline	2006-2008	2009	2010
New counseling rooms set up in health facilities	0	22	20	31

Table 21: Number of health facilities with a dedicated, equipped and staffed counseling room

Health education sessions:

Health education events held by BHS coordinators in the community	0	806	968	1,720
Clients reached in the community	0	35,213	25,692	54,165

Table 22: Number of events organized and people reached through BHS coordinators

d. Media

There was regular media coverage of activities undertaken by BHS in addition to special publications of stories, articles and other events related to subjects and activities promoted by BHS.

Two workshops were organized in 2009 and 2010 for training media personnel in cooperation between the MOPHP and the Ministry of Information. As a result a competition for best media achievements was organized by the two ministries and awards were given to successful media members.

	2005, baseline	2006-2008	2009	2010
Newspapers items to cover specific BHS events	0	103 (17 En)	63 (5 En)	77 (1 En)
Health related Newspapers items scanned for				3,461

the 2010 competition				
Radio activities in 2010				603 (440 health spots, 142 dialogues)

Table 23: Number of media items produced in support of BHS messages and activities

e. Information and education materials

Always in consultation with the MOPHP Health Education Center and with the approval of the Population Sector, BHS updated and reprinted 7 posters previously produced by Catalyst and added another 13 posters to cover the essential aspects of Maternal and Child Health: Prenatal care (2), Nutrition (3), Labor (2), Breastfeeding (4), Postnatal care (2) and Family Planning - HTSP (3). These were distributed to all health facilities in the five governorates as well as in other governorates, taking advantage of every occasion (training events, conferences, meetings of MOPHP, etc) to give health providers and managers with copies they would use in their facilities.

Each of the 20 messages was printed on 3,000 posters for a total of 60,000 posters. All 20 mobile team vehicles established during the life of the project as well as other vehicles provided for supervision or student transport (one school bus for midwives of Shabwa institute) also display some of the new posters painted all over the vehicles.

The posters were distributed as follows:

- 5,000 to each target governorate (Amran, Marib, Sadaa, Shabwa, and Al-Jawf) = 25000
- 10,000 to Health Education Center (Sana'a) to be distributed in other governorates not targeted by BHS
- 100 to the University of Dhamar.
- 500 to the members of community mobilization teams and Religious Leaders during the training courses
- 600 posters including 20 health messages were distributed to the health education and information directorate in Sioun.Hadramout Governorate.
- 500 distributed during the population international day in Hodeidah governorate

These posters were part of a group of materials collected by the MOPHP in 2008 with funding from GTZ and submitted to an objective analysis by a group of experts who checked for content and form and whether the messages were understandable, culturally appropriate, illustrated etc. Five of the seven posters collected from BHS received the judges highest recognition award for overall suitability and quality.

Other materials that BHS produced include brochures produced to be distributed by religious leaders during their activities:

- One brochure on family planning methods.
- One brochure on breast feeding.
- One brochure on safe age of marriage
- One brochure on the standard days method of family planning

BHS printed 50000 for each brochure and distributed them to the male and female religious leaders in the target governorates, to the CMGs and volunteer educators, to the educators for the safe age of marriage, and to BHS coordinators in the target governorates. All BHS materials printed were distributed and only small quantities remained at Pathfinder Yemen office, not in sufficient quantities to support any continuation of the same distribution after the project ends.

BHS also ordered 2000 copies of the Community Health Education Manual as part of a larger order managed by UNICEF on behalf of several organizations and projects (UNICEF, UNFPA, Social Fund, GTZ and the MOPHP) all of whom were involved in the design and production of this manual as a collaborative product to be used nationwide. .

BHS printed 5000 copies of Mothers booklet on Best Practices for distribution at health facilities where mothers deliver and receive counseling prior to discharge, and added another reprinting of the same booklet to meet the needs of the scale up of the BPs to more facilities in 2010.

In coordination with the Social Guidance Foundation (a faith based NGO), BHS completed the preparation and design of a reference book on religious opinions in support of reproductive health.

The contents of the BHS behavior change communication messages have always been selected and developed to have relevance to the program components and target audience. The subjects cover Family planning, Breastfeeding, Prenatal care, Postpartum care, Delivery (danger signs, preparedness), neonatal care (danger signs and care) and mother and infant nutrition all of which are central to BHS mandate as well as to the MOPHP and governorate goals and needs.

One of the most successful health education and community mobilization activities carried out by BHS has been the development and dissemination of the Community Health Education Manual. It was an illustration of the integrated approach covering a wide range of essential health and social concerns; of coordination and harmonization among various development partners; and of proper use of a publication as a tool to support community based interventions. The development of the manual led to the training of 934 volunteers by BHS efforts in addition to hundreds of others trained by other development partners and also to the implementation of field activities by these volunteers and other educators trained, which resulted in hundreds of thousands of individuals being exposed to the messages contained in the manual. Furthermore the same manual was the basis of a media campaign and the production of radio based messages and programs as well as the basis for involving religious leaders in developing a sermon book incorporating these messages and supporting them with religious arguments.

Throughout this activity, BHS consistently worked with the national health and population education center (MOPHP) to develop its capacity and always ensure messages are approved and owned by the MOPHP.

9. Education about the Safe Age of Marriage

This activity was conducted in 2009 and 2010 as a result of a grant from ESD and was implemented through the Yemeni Women’s Union in the districts of Al Sood and Al Soodah in Amran governorate. Two coordinators from the YWU ensured the supervision of field activities while a BHS coordinator monitored the whole activity on a monthly basis.

BHS organized open days events on a quarterly basis, these were held in local schools and included presentations, films, medical services provided for women and children by the governorate mobile team.

Safe Age of Marriage	2009	2010	Total
# of educators receiving training	40	44	84
# of educators receiving refresher training	40	-	40
# of meetings held by educators	1,784	911	2,695
# of people in attendance at educator meetings	35,813	14,401	50,214
# of open day sessions held	8	11	19
# of open day session participants	2,150	3,376	5,526

As a result of these awareness sessions parents were expected to have a better understanding of the health and social benefits of delaying marriage for their young girls in particular and were encouraged to keep their girls in school.

At the end of the first year of the project the educators recorded 101 cases of young girls and 70 cases of young boys who wet back to school as a direct result of the actions of the educators. There were also 57 incidents of marriage cancellations for young girls (age 9-11) as a direct result of the interventions.

10. Capacity building

BHS involved several national organizations in the development and implementation of the project activities by providing them with support to run such activities including:

- Service delivery services: Yemen Red Crescent Society, Yemen Family Care Association, Ribat Religious organization (faith based) and the Yemeni Midwives Association
- Advocacy and community awareness: National Safe Motherhood Alliance, Yemen Public Health Association, Social Welfare Society, Yemen Women’s Union, Social Guidance Foundation (faith based)

Constraints and limitations

Data

Lack of reliable data has been one of the constant factors throughout the life of the project. A sister project to BHS (PHR plus) has been mandated by USAID to assist in this area through piloting new and efficient ways of collecting, organizing and disseminating information on health issues and services and providing assistance to the MOPHP to upgrade its health information system. Progress has been slow and successful models implemented in one governorate (Amran) had the potential of being replicated and scaled up everywhere else but would have needed extended time and resources beyond what was available.

Human resources

Lack of medical and paramedical staff in the facilities has been felt in every governorate and has hampered efforts to upgrade such facilities. There is also a general lack of qualified management personnel at most levels of the infrastructure.

Budget

All clinic managers are unanimous in stating that they have inadequate budgets to cover their regular utilities costs, buy cleaning supplies, carry out maintenance or to simply run their activities properly. The MOPHP is not able to secure enough funding from the Finance Ministry to meet its growing needs.

Systems and policies

Even when there are policies, standards and rules on the MOPHP books, they are usually not enforced due to lack of resources to support such rules and to provide the supervision needed. Integration and coordination: a common grievance against the MOPHP has been the fragmentation and lack of integration. This results in wasted resources and opportunities and poor quality of services to the clients.

Poverty

Poverty is a key reason why women do not have access to health care services, money is needed for transportation, fees for registering and / or for the services and medicines. Often times health providers cite the absence of free medicines as one reason why people would not come to the clinic.

Women status

Low level of education among women is correlated with their low access to care, the role of men is often cited as crucial for women to enable them to have access to the services they need.

Culture and traditions

Harmful practices and traditions often represent a barrier to access to modern health services, traditional beliefs for example are that pregnancy is a normal state and women are expected to labor through on their own and make it, whereas common public health wisdom and evidence based studies show that every pregnancy is an at risk pregnancy and also that if proper care is given every delivery can be made safe.

Performance analysis: Results, targets, areas of under achievement and reasons.

This section discusses all aspects of the design, implementation, monitoring and impact of the BHS project.

Design

The BHS program design built upon the success of the previous Catalyst project and continued the same effort in terms of refurbishing existing health facilities, training of cadres both on the job and pre-service to increase availability of midwives and mobile medical services to serve facilities that are devoid of staff and equipment. The project was designed according to the scope of work formulated by USAID and responded closely to the requirements of such scope of work. Pathfinder International with the technical inputs of the ESD project provided USAID with work plans for implementing the scope of work that meet the requirements of the scope of work and contract and take into consideration the needs and situations of the beneficiary partners on the Yemeni side.

Monitoring and evaluation

To facilitate monitoring and evaluation and obtain information on project activities BHS designed an M&E plan that covers all aspects of the project activities and outlines the source and frequency of reports as well as any known shortcomings in data quality. This was integrated in each year's work plan. For project reporting BHS devised forms and templates for data collection some of which were as follows:

- Needs assessment check lists, including complete RH services assessment schedules (10)
- Best practices check lists and monthly reports forms
- Training activity report form
- Clinical skills check list
- Community mobilization report form
- Mobile team monthly report form
- Mobile team patient encounter form
- Religious leaders activity forms (3)
- Coordinators monthly statistics form
- Equipment form
- Safe age of marriage report form
- School health record

BHS set up databases to collect and analyze the information from these various reports:

- Training
- Equipment and construction
- Community education meetings

- Religious leaders meetings
- Mobile teams services reports

BHS used these forms and databases to track activities and be able to provide the reports that are due to USAID and ESD every quarter as well as the information for the annual report to the MOPHP and to feed in the information required for the USAID project monitoring reports and the S.O. indicators. BHS quarterly reports follow the order in which the intermediate results are outlined in the project document. The type of indicators that are measurable via reasonable and affordable monitoring and data collection activities can only be output indicators whereas the impact on health indicators as such will usually be beyond our reach unless we do periodic surveys that are actually useful for the country but quite outside of BHS means and mandate. Information on services is only available through the MOPHP and according to the classification they use (for example there is no information on how many use certain procedures like AMTSL or partograph or other select procedures). On the other hand another USAID project (PHR) had developed a very short patient encounter form in 2005-6 that is supposed to collect information on each client visit, service provided, diagnosis and treatment prescribed but fell short of getting it adopted by the MOPHP for general use. The form has been used on a pilot basis by BHS for the all the mobile teams and an analysis was done of a sample of these forms in 2007. The form is still being filled by MTs and BHS will be able to do an analysis of the data collected for the last two or three years.

BHS designed monitoring plans and data collection tools that covered every aspect of its interventions whether it is construction or equipment, training, mobile teams, community education, religious leaders involvement or other interventions. For information on services in clinics BHS relied on getting these from the MOPHP as there was no involvement of BHS in direct service provision.

The MOPHP lacks the resources to institute a functional data collection system and supervision system and be able to produce information that updates the status of **all** its health facilities every quarter. This is an area where post BHS projects ought to be moving: use an agreed upon supervision manual and checklists for use by potential supervisors, agree on standards for supervision (frequency, depth, logistics etc.) select candidate supervisors from each governorate (include the RH director), train them in supervision (with the collaboration of the health Institute as a way to help them make a curriculum for a course at the institute for a regular training of supervisors) and agree with the DGs on a schedule of regular visits, reports and meetings with supervisors to analyze results and use supervision results for actions. None of this can take place without proper financial support including for transport for supervision and recurrent expenses (this may costs as much as the cost of a mobile medical team in each governorate). If this system is set up, it will provide the information the MOPHP needs to have up to date information on all what's going on in the field. This area has not been addressed by BHS until now and is a

worthwhile direction to move into now that large investments in the renovations have been made and lesser investments may be needed in that area.

Some inferences could be made about attributing increases in use of services to the BHS interventions because no other interventions were observed or known in these areas and if services were left to their own devices without support chances are they will stagnate, decline or increase only slightly at best. The CYP statistics available have shown a steady increases but assuming they are accurate and reliable, BHS cannot take credit for what goes on in this area as a result of its interventions alone because other crucial elements affect these results such as availability of staff, commodities and budget for running costs, three major components that affect supply.

Where the BHS project had a direct involvement in the services such as through the mobile teams, the results in terms of use of services were very positive and could only be attributed to the BHS intervention in partnership with the MOPHP.

Management policies, structures and practices

- The decision making process in formulating the plans and implementing them has always been a joint process where the beneficiaries (MOPHP at national and local level) take part in the needs assessment, then they take part in the prioritizing of activities when funds are not enough to meet all plans, they sign off on plans before implementation and monitor implementation jointly. The most evident illustration is in the construction and equipment which are the biggest cost items, but are also evident in the choice of education activities and where to orient efforts when it comes to selecting one district over another, or even for the selection of BHS coordinators in the governorates which is a decision made by the project but in full consultation with the director of health in each governorate since this person is going to work under his de facto supervision and with his support.
- BHS was very careful with the Yemeni partners to avoid providing assistance that is not requested or wanted, pushing specific items on one's own agenda or trying to use the project interventions to impose conditions on the MOPHP that can be seen as obtrusive, for example a few years back it was impossible to obtain any data on population or anything unless it is approved by the governor and later things became more open as confidence and trust were built up. Similarly although there is a strong demand for data on services and local situation, data collection by means of project personnel going to the field and collecting information is seen as very suspect. BHS first KAP survey in 2004 required a lot of convincing with the authorities in the governorates so that they understand it has no other motives!. The PHR project that was supposed to help in this area only succeeded in doing the GIS mapping and what is called the health facility viewer, which is a one-time picture of what exists and not at all a system to produce continuous information. Not much was done to improve the HIS system, or the national capacity in this area and if we require this system to produce results that we consider of quality we have to invest all the way down to the health facilities in

training, in systems development, and even in running costs. In the end we will still get bad quality products because in final analysis no health worker who is badly compensated will have any motivation to produce results or work additional hours to do a better job. Similarly no worker is being sanctioned for not doing his/ her job in the Yemeni government system. Eventually everything comes down to how the work force is organized and paid to work or not to work whether it is for services or for management. Faced with the impotence of the system one is tempted to step in the void and do the job; but no project can sustain this or even should try to start doing the work of its counterparts. The understanding of mutual responsibilities between a project such as BHS and its MOPHP counterpart is that we also trust them to do their part and to be as interested in improvements as we may be. Verifying that the MOPHP are doing their part is done by BHS and we have had good results from the health offices in the governorates informing us about their progress but they can only deliver what they have and they do not have much in the way of accurate information on their facilities and services.

- Although it sounds obvious that promises should be kept and agreed upon plans should be implemented, Yemen has seen its share of donor projects being implemented differently, often drawn as donor driven activities without involvement of the beneficiaries or changed at will without adherence to the “promises” or sometimes not implemented at all. Catalyst and BHS after it, set out to plan activities and involved its partners at all levels, then showed a strict adherence to agreed upon plans, unless changes are needed in which case they were discussed and agreed again. There was full transparency in implementation and systematic consultation to discuss steps in implementation and any changes. BHS built its credibility accordingly and this greatly contributed to building a partnership between BHS and the MOPHP and motivating our partners to take ownership in field activities and be eager to implement them. Construction projects which are notorious for running late and over budget were consistently on time and within budget and contractors who worked with BHS appreciate the difference and were motivated to do their job properly and on time as they were sure to be paid on time which never happens with contracts funded by government agencies where some facilities are completed and stay unfinished and unused for years at times because contractors are not paid.
- The third element in the project’s success is the quality of the interventions starting with the most obvious and observable areas where quality can be equally assessed by BHS as well as the beneficiaries which is the area of construction and equipment. Providers for example are well placed to state whether a clinic is well built or not and whether equipment is bought just because it is cheap or if the project had a goal to provide a quality item. BHS also provided service after delivery and provided maintenance, a sensitive element in quality.
- Actions that BHS undertakes are usually part of a continuum or an ensemble of interventions that mutually reinforce each other. For example building and equipping are not approved for a targeted facility unless it already has the necessary staff to run it. Midwives are not

recruited to go in pre service training unless they are selected from an area, village or town, where the local clinic has a vacant spot approved for a midwife.

- BHS focused on improving access to RH services and did not just fill any need that was expressed in other areas of health services (such as providing X ray machines, dental clinics, ambulances, etc. all of which are needed in almost every facility visited). The transparency in the focus made the partners clear about what to expect and how to “use” the project to advance their goals in the shared area of interest.

Involvement and or impact on policies, integration and coordination

It was not part of the project mandate to target policies for change or impact or to have designed advocacy interventions. The project needed to focus on service delivery level at the governorates and was not expected to do more at the national level than keep the MOPHP counterpart involved in supporting what needed to be done in the governorates. However BHS management was aware of the importance of both advocacy and policy and built these items into its intervention in several ways:

- BHS helped the formation of an umbrella organization (National Safe Motherhood Alliance, affiliated with the Global WRA) whose primary role is advocating for safe motherhood with government and raising awareness among the public as well as community leaders about RH issues. NSMA groups several key ministries, several government agencies like the National Population Council and the High Council for Motherhood and Childhood, NGOs and individuals. BHS had a key role in supporting all steps toward the establishment of this organization which became official in Sept 07 and functioned with small funding from BHS and in kind support from the HCMC (office space) until now. The NSMA joined the WRA and recently received funding from DFID via the WRA for about a quarter million US\$ to conduct advocacy and awareness activities.
- Catalyst, continued by BHS, participated in the initial set up of the Reproductive Health Technical Group and the subsequent improvements in its SOW and meetings to make it a forum for coordination between all the international development partners and their Yemeni counterparts thus creating also an opening for impacting MOPHP strategy formulation (latest strategy was edited by BHS consultants and staff), service guidelines (BHS staff worked on subgroups dealing with various issues such as commodity security, youth, FP standards, service standards in general). In 2009 MOPHP approved the creation of a permanent subgroup for Scaling Up Best Practices within the RHTG, as a result of BHS efforts and following the success of the first phase of introducing the BPs. The RHTG was at the source of changes in the MOPHP policies toward midwives, getting the Minister to approve a new code of ethics and a JD for the midwife that includes additional tasks such as IUD insertion.

- BHS supported a few health professionals to establish the Yemeni Public Health Association in 2008, assisted with the drafting of its constitution and bylaws and the costs of its first general assembly. This association almost immediately got involved in the drafting of the new national Public Health Law which was completed in a record time, discussed at the parliament and in the process of being passed.
- By working with the media and with religious leaders BHS has contributed in an indirect way to raising awareness including among politicians about specific major issues that BHS was involved with in its programs such as child marriage, family planning, postpartum care etc...
- BHS was among the donor representatives consulted by the MOPHP when specific decisions were being considered by the MOPHP such as for increasing access to FP (MOPHP decreed gratuity of FP methods) for reducing maternal mortality (RH list of essential drugs and decree on gratuity of normal deliveries), commodity security framework, performance based payments for health professionals in the MOPHP, voucher scheme, etc.
- Management capacity strengthening was the mandate of the sister project to BHS (PHR-Abt) including for management and supervision, finances, research and MIS. This has been a frustrating gap in the USAID intervention, as without a sound management the rest of the interventions can become meaningless.
- BHS contributed to the strengthening of the Population Sector technical capacity as well as that of governorates in programmatic areas such as service standards, quality assurance, contraceptive technology, best practices, health education and communication. This was done by involving the national level staff in the process of supporting governorate level thus fulfilling BHS mandate first, as well as assisting the MOPHP to play its leadership role toward the governorates and being a well informed partner of BHS in assisting the governorates. Staff of the Population sector consistently participated in needs assessments, in technical workshops, in development of materials and in some cases were sponsored to participate in training or international exchanges and conferences. BHS also shared technical materials sent by PI and ESD on relevant technical areas such as contraceptive technology, safe motherhood, infection prevention etc.
- BHS provided technical assistance but not so much in the form of international assistance because security concerns often prevented planning in that direction. There were several instances where TA from ESD was arranged to address technical areas that are new to Yemen such as to introduce the Improvement Collaborative for scaling up MNCH/FP best practices, or to develop M&E plans for the BHS project as a whole and for the BP project, to develop training manuals and management capacity of the Yemeni Midwives Association (YMA). Yemen has talent in many areas and local recruitment of Yemeni professionals or international experts available locally for TA was preferred for many reasons, be they cost or

language, flexibility, better knowledge of country and culture etc. as well as security restrictions over international visitors.

- Technical assistance gaps were the subject of much discussion among donors and the EU conducted a mapping study of TA to provide a better idea of what was available and what was missing as well as an assessment of how current TA is perceived and managed (or not) by its primary user – which should be the MOPHP.
- MCH tasks and programs in the MOPHP are not integrated and are split between two sectors that until recently did not work together at all. The ministry's call for integration is only recent and has come about as a result of a GAVI grant and pilot project targeting 65 districts in all of Yemen (from among nearly 320). When such project was in its inception stage it conducted a study of existing programs in the country to highlight opportunities for integration as well as illustrations of cases where integration is successful. BHS was selected for its mobile medical teams and for its health education messages and materials as a success story in seeking and achieving an integrated approach.
- BHS interventions form a package that follows the integration requirements –seen as client friendlier and easier to apply at field level than at national level. The governorate and health facility are suitable venues for integrated approaches whereas at the national level there are self motivated interests, power struggles and corruption to keep vertical programs alive and carved out territories safe from any attempts at reform.
- Health facility refurbishments address the total RH/MCH /FP needs of the facility, including areas such as infection prevention, education and counseling, clinic appearance, clinic waiting areas etc, that are shared with other services such as immunization, general medicine and emergency care which are not necessarily FP/MCH.
- Training curricula developed by BHS and implemented for health providers as well as for education and community workers include a comprehensive balance of MCH and FP topics and skills but also include immunization, nutrition, health education, counseling and hygiene, in full implementation of the Ministry's directive to prioritize these areas for integration (as decided in the GAVI project)
- Religious leaders training has also reflected BHS orientation toward integration as a strategic choice to make FP itself more acceptable as part of an integrated package and prevent any misconceptions or accusations that USAID is imposing FP as its main agenda item in its assistance.

Impact on services and quality

- Postpartum care was non-existent and most facilities at the PHC level that were visited at the NA phase had eliminated their normal delivery room and gave up on offering delivery services using the argument that people and women prefer delivering their babies at home.

Neonatal health services were non-existent in most of the governorates where BHS (and Catalyst earlier) started working. BHS made a strong contribution to reinserting delivery services as part of PHC facilities by adding extensions to targeted clinics that had no delivery services and adding one comprehensive obstetric care unit in each of Amran (1), Marib (2), Shabwa (1) and Saada. BHS introduced neonatal care facilities for the first time in Amran, Shabwa and Marib. These additions have brought the targeted governorates to be within international standards for access to EmOC and also within MOPHP standards which increased the number of facilities needed per population given the fact that Yemeni population is far more scattered than the average population size in most countries upon which these standards were set.

- To improve home-based deliveries, as a vehicle to identify and refer complications to referral facilities, BHS provided training to midwives in EmOC and in safe and clean home births and supported the distribution of safe delivery kits locally produced.
- Mobile teams were not known in Yemen before USAID Catalyst introduced them and BHS expanded them. Mobile clinics were known but suffered from being too large and restricted in their movement as well as expensive to acquire and to run thus their number remained limited and they never were likely to reach rural areas or provide an answer to the problem of lack of staff in most health facilities. Through mobile teams regularly visiting health facilities that are short on staff and equipment and thus inactive, BHS activated up to 20 health facilities for each team deployed and served as many villages or clusters of villages. Client numbers were often higher in the one day the team visit is scheduled than they were for a whole month when the clinic is normally either attended by a health worker or simply closed.
- Family planning and RH services statistics rose in the targeted governorates as shown in the service statistics of the ministry of health.
- The number of midwives per population in the five governorates were much lower than the national average in 2004 and after the interventions by Catalyst (143 added) followed by BHS (203 added) their rates are much higher than the national averages along with the fact that most of them are employed whereas a large proportion of the midwives counted in the national statistics are actually in the large urban areas and either are unemployed or not working as midwives. Furthermore with the organized establishment of midwives as private clinic owners BHS has started creating new service delivery points where women are much more at ease coming to get a personalized and private service. The number of deliveries in these private clinics compared favorably with the local health center which often provides very limited delivery services (i.e., not open 24 hours and without as good an environment where women feel welcomed)

- To improve migration of staff toward neglected areas and improve retention, BHS built housing attached to the health centers; that is also a measure to increase availability of service on a 24 hour basis.

It is not possible to assert that the quality of MCH/FP services at the upgraded health facilities (PHC or hospitals) has improved as a result of the support given by BHS because the achievement of quality in the health facilities depends on many additional factors not controlled or supported by BHS such as staff availability and working conditions (compensation), availability of drugs and supplies, financial resources for running costs and the management of the facilities.

The clinical standards used to upgrade facilities and train staff were as follows:

- MOPHP standards as a minimum for upgrading facilities
- MOPHP standards if available for training on the job
- MOPHP standard for curricula of the health institutes (developed years ago with Intrah Prime and regularly updated by the Sanaa central institute with help from various donors (GTZ in particular)

The quality of services provided by the mobile teams is also subject to the same issues for fixed facilities although in their case the payment by BHS of a transportation allowance has played a key role in motivating staff to work on these teams and make the scheduled visits, and BHS coordinators were available to monitor performance and dispense payment only when the work is done.

The Evaluation of the MTs performance was assessed by BHS on occasions and some teams were found to be performing less adequately in certain areas, primarily because trained staff were replaced by the Health Office and the new staff were untrained. Thus training was provided to address the gaps. There were no complaints about quality of services and DGs provide good feedback on these teams performance. BHS coordinators regularly go with the teams and perform quality checks regularly. MTs have the best equipment they can have but need more training constantly including for reasons of staff turnover. The coverage is high as these teams now cover all or most districts in each governorate, but reach is still limited as the directions for the teams are to go to health centers that are 1 hour or less away from their departure center (so they can return home within reasonable time). BHS believes that more units would improve coverage as well as frequency and reduce the gap between visits so that women and children have more access (at least twice a month and ideally once a week). Also more units could mean a better reach giving latitude to health offices directors to schedule the teams to cover more remote areas by changing their schedule to make them establish base in a given district each week instead of the governorate center.

The cost effectiveness is much better than that of fixed facilities, it cost less to establish and run the mobile team than it would to establish and run a fixed facility especially considering the fact that most fixed facilities remain unstaffed and unused and so they represent a total waste of resources.

The financial sustainability of the mobile teams is not any better than that of the rest of the MOPHP services, it is not possible to discuss it or consider it as long as MOPHP budgets are as dismal for their facilities as they are now. If the budgets are improved, the MT running costs are quite moderate in comparison to fixed facilities and can become part of the MOPHP line items in their budget. One HO has provided for one of his 3 teams to be covered within his local budget and all DGs and the MOPHP have been alerted to the need to begin phasing in the running costs of these MT in their regular budgets. It should be noted that Health Offices already provide a good share on the costs since they pay for the personnel and provide supplies and medicines. Continuing this shared system for the foreseeable future represents a very reasonable intervention and the costs are very small compared to what it costs to install staff and equipment in each of the facilities (a long term goal and one that may be still decades away) Other countries that have better resourced health systems than Yemen are still using MTs today as a solution to the lack of qualified staff in remote areas, even 40 years after having started them..

Health directors in the governorates and managers at the MOPHP have adopted the MTs wholeheartedly and run them efficiently with BHS logistic support and monitoring. Furthermore some are experimenting with different schedules than what BHS initially initiated so that they can reach more remote locations. Finally the MTs have been at times the only resource available to the MOPHP to respond to disasters and emergencies as was the case when floods hit the Hadhramout region, and during national immunization campaigns for polio vaccination.

Quality and impact of community activities

- The BHS RL experience in Yemen was praised by USAID/W, and USAID/Yemen and was featured on USAID Web site and Frontline magazine. Yemen BHS was invited to share its experiences with Pakistan and Egypt (May 09) as well as during the international technical meeting on Best Practices for Asia and the Middle East held in Bangkok in 2008 and 2010. The BHS experience then became a model used by the US Embassy in Sanaa to integrate wider development messages in the work of RLs.
- The numbers of populations reached through RL were consistently rising, with good feedback from the audiences, but activities were winding down in 2010. A comparison between districts where RLs worked with BHS and others where RLs did not take part in BHS activities showed no significant differences between them in terms of increase of users of family planning services. On the other hand religious leaders were cited as a major source of information about FP, RH and breastfeeding and a trusted source in those districts where they were trained by BHS.

- CMGs were launched by BHS to bring non health sectors to support health. They were successful in generating a continued involvement in organizing educational activities for the community
- BHS achievements in the area of community mobilization were highly praised particularly because the approach included follow up and support to volunteers and outreach workers who are trained. Support came in the form of materials provided to support the outreach work, particularly the Community Health education Manual, and also awareness and education materials and in the form of regular periodic meetings with field outreach workers to obtain feedback, collect report on progress, provide additional training and materials and discuss future plans. Not the least important was the fact that BHS reimbursed community outreach workers for transportation expenses and therefore encouraged them to reach people beyond their local communities.

BHS role in facilitating synergy, coordination, and information sharing among other donors, and the Government of Yemen

- BHS regularly contributed through the RHTG to share information about USAID health programs and successes.
- BHS mobilized the donors and the MOPHP and leveraged resources in support of USAID initiatives such as Best Practices, the celebration of World Contraception Day or the dissemination of HTSP.
- BHS mobilized the donors and the MOPHP to support the YMA and the NSMA
- BHS was the key player in the success story of developing the community health education manual with UNICEF, UNFPA, MOPHP, Social Fund; and in further involvement of NGOs during training and distribution of the manual: YWU, Al Saleh, SOUL, ADRA.
- Coordination with donors is a USAID activity but it needed help from BHS to organize breakfast meetings and working sessions on various issues such as performance based payments, commodity security, mapping of aid, sharing plans and results of project with MOPHP and donors, sharing technical information about mobile teams with donors, responsiveness to donor requests for feedback when special missions visit Yemen, participation in voucher scheme feasibility study, collaboration with GTZ for quality assessments, role in best practices.
- BHS also coordinated with other sectors and addressed gender issues in the health field through the RL program, in educators training and in providers training. Gender was also addressed in staffing both at national level and in coordinators positions in the field and it was an important consideration in the strategy to deploy midwives as a gender sensitive approach to services

Security issues

Saada, and Al Jawf have been consistently a security concern throughout the project and at various times during the five years of BHS, Shabwa and Marib provided their share of security issues. This disturbed the distribution of equipment, field visits, training, and mobile team services. However BHS had its coordinators located in each governorate and was able to monitor the situation and consistently have a presence to provide support to field activities.

Programs dropped or delayed: school health, water and hygiene, immunization, structural renovations:

Following the MTR in July 2009, it became more evident that there was no strong backing from USAID for BHS to get involved in support to routine immunization or water safety issues and certainly no resources to continue the renovation program that was initiated earlier, which was not a building program but just one of renovations, yet even that was no longer possible under the prevailing uncertainty of USAID funding which was never secure for more than 3-4 months at a time.

The only reasons why programs were dropped was because USAID MTR recommended it and / or USAID provided no funding for it.

Additions to the program: Best Practices, SAM,

The additions to the BHS program came as a result of substantial assistance from USAID/W through the ESD project and consisted in some of the most innovative activities that BHS conducted with very little funding: These were the support for Religious Leaders since 2007, the Best Practices since 2009, the safe age of marriage since 2009 and the support to the YMA and private midwifery practice since 2007.

Actions / corrections resulting from evaluations and reviews

The MTR (July 2009) issued recommendations and BHS immediately included them in its 2010 work plans as follows.

RECOMMENDATIONS	ACTIONS
1. For expansion phase: intensify quality/management	No new areas were added. BHS focused on improvement in quality of services through training of HC staff in quality / BPs BHS supported MOPHP/Population Sector to conduct semi

capacity building and selected health system development rather than add too many new areas

annual and annual reviews for evaluation and planning and provided MOPHP with training funds for management improvement (see section on support to MOPHP)

2. Exploit all opportunities to strengthen family planning interventions as these are the weakest part of the national program

BHS provided more logistic support to governorates to support FP services including vehicles for distribution and for supervision; it supported RH departments in governorates, provided training on updates in contraceptive technology and balanced counseling, introduced a new FP practice in hospitals (Postpartum and post abortion IUD, supported more RL involvement in favor of FP.

3. Strengthen liaison with PHC sector to ensure child health interventions coordinated with GAVI-HSS support for training and new supervision system

There was no focal person from PHC assigned (by USAID or by MOPHP) to work with BHS but BHS nevertheless worked closely with the Family Health Division and held joint meetings with the HSS team, coordinated Immunization intervention with PHC and launched the school health initiative with the PHC department.

4. Build governorate capacity for RH supervision using existing tools, including paying some recurrent costs

BHS trained RH directors in RH/ BPs and FP and in supervision and monitoring. BHS helped to develop checklists and report formats and introduced new tools to measure progress in implementing new best practices in hospitals which were adopted by the MOPHP. Trained service statistics personnel to improve understanding of the vital role of MIS and improve skills and performance.

In supervision, BHS supported MOPHP to train its cadre of supervisors and to develop and issue manuals for supervision.

BHS worked closely with RH directors and provided support to them especially in Al Jawf where the RH director was almost the only working member of the health Office.

The RH directors are the focal point for RH and for the pop sector in the governorates. And they worked closely with BHS coordinators; they were key persons targeted by the training and coaching within the Best Practices scale up.

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| 5. Help DG's establish RHTG's at Governorate level where more than one donor is involved | No progress was made in this area especially that development partners stopped going to the governorates after the security deteriorated. Some like UNFPA and Netherlands seemed to have stopped their support to the MOPHP altogether. |
| 6. BHS should assess and use MOPHP-approved training materials and TOT curricula developed by other partners as much as feasible | <p>BHS supported the MOPHP to upgrade its manuals and guidelines and submitted its own curricula to the MOPHP for review before implementation. Curricula developed for example for Doctors protocols in essential obstetrics were developed with BHS support by the MOPHP team.</p> <p>EmOC / Postpartum care / PNC / neonatal care were added as essential areas for training and BHS conducted numerous practical training workshops on these subjects in 2010</p> |
| 7. More intensive follow-up of C-midwives for whom pre-service training was provided by BHS at HIHS (supervision, skills assessment and refresher training) | <p>BHS placed midwives from Al Jawf in an expanded program to establish them in private practice in every district.</p> <p>BHS provided skills training in the BPs to all graduating midwives in 2009-2010.</p> <p>BHS has worked with the KFW team to involve midwives as service providers in the Voucher program being launched by KFW with Yama'an and the MOPHP.</p> |
| 8. Further improve clinical skills of mobile team doctors, midwives (MVA, implants, etc) | <p>BHS continued the training of mobile team members and supported the adoption of these teams by USAID new incoming CLP project.</p> <p>In light of the apparent commitment of USAID and CLP to continue the mobile teams, BHS offered to USAID/CLP the services of its governorate coordinators as key staff for supporting and monitoring MTs</p> |
| 9. Expand mobile team operations as budgets allow | BHS expanded teams and added another 8 after the MTR so the numbers went from 12 to 20. |
| 10. Conduct cost and patient load analyses of mobile teams for MOPHP to encourage | <p>Patients encounter forms are available for many of the program years and need to be analyzed if additional funding was available.</p> <p>BHS discussed scenario for financing by MOPHP through a</p> |

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| eventual sustainability | phased in financing but this has to be taken up by the new USAID health project succeeding BHS. |
| 11. Consider scaling up Best Practices to 5 core governorates and include AMTSL at hospitals | Expansion done to the 5 governorates as recommended. The scaling up was further extended to the whole country with support from ESD. |
| 12. Simplify Best Practice indicator list for scale up phase to improve replicability | The M&E plan and indicators were developed by the health providers and managers and although the list is long, it is the only way to collect information on whether services in these areas are being delivered. |
| 13. Invest minimally in Yemeni Midwifery Association until institutional problems resolved and leadership improves | BHS monitored the progress of the YMA and did not increase its support. The YMA has sorted out its leadership problems which were not faults of its own but a reflection on the regime's constant effort to control NGOs. |
| 14. Involve facility and district level health educators in training and utilization of Community Health Education manual; it should be available in facilities and mobile sites | Distributed the CHEM to all facilities.

BHS worked with MOPHP to train Health educators in all governorates |
| 15. Continue working with existing NGOs and religious groups but emphasize during extension phase measuring outcomes of investment | A post intervention KAP was conducted with regard to Safe Age of Marriage

There was no interest or resources from USAID to carry out any of these recommendations. |
| 16. Community Mobilization Group lacks institutional link with health services. | CMGs and RLs were asked to work more closely with Health centers and meetings were held with DGs of health to establish stronger linkages. |

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| <p>Establish indicators like #'s of referrals to health facilities, requests for educational sessions</p> | <p>It is possible to share service stats of HCs with CMGs, encourage analysis of progress and results and focusing interventions accordingly but the statistics themselves and supervision and monitoring are lacking in the health facilities.</p> |
| <p>17. Prepare annual reports for USAID with M&E data, analysis of progress, challenges and lessons learned (share with MOPHP Pop Sector)</p> | <p>Developed the annual report format and prepared 5 reports for all 5 years of the program which will be submitted with the final report as part of the close out package.</p> |
| <p>18. Submit a new PMP for the extension period for USAID approval with enhanced outcome indicators</p> | <p>BHS developed a PMP based on the current strategic framework and submitted it to USAID for 2010. PMPs were also developed for the previous years of the project and will be submitted as part of the close out package</p> |
| <p>19. Utilize more external short term technical consultants with RH clinical expertise and experience in MNH topics to build capacity among Yemeni doctors and nurses</p> | <p>ESD TA was used. Security issues continued to be the main obstacle to external TA.</p> |
| <p>20. Team endorses proposed support to Pop sector national work plan related to the focus governorates</p> | <p>The 2010 support to the MOPHP reflects this. The MOPHP/Population Sector has responded well to this support and their ability to implement activities was very good. The Population Sector has demonstrated with BHS that it has no absorptive capacity issue as some donors claim, that the real issue is whether there is a commitment by the donor to support the MOPHP activities and not try to substitute their own for these. BHS has provided the flexibility as well as the coaching and technical assistance needed to help the Sector succeed in achieving all of its planned activities.</p> |

BHS legacy and Lessons learned

Within the USAID health programs implemented in Yemen, BHS has made a significant contribution both in terms of the process and the outcomes of the intervention. Some of the testimonies received from partners cite the reliability of BHS: “BHS delivered what it promised to deliver”, others note the responsiveness: “ when the Dengue fever crisis hit Shabwa, USAID through BHS were the first to provide support for the MOPHP to carry out education and awareness campaigns”, others note the appropriateness of the intervention to the needs “this is what we said we needed and BHS provided it”, others mentioned the trust and respect of the partners’ opinions as one DG said when speaking about how he was able to deploy one of the mobile teams using a different approach than originally proposed by BHS: “BHS provided us with the tools and resources and trusted us to be the ones who knew best how to make it work in our area” . These and other aspects are some of the elements that make interventions become success stories and the examples in the following section will present several interventions that are recognized as successful.

The common elements to these success stories are that each intervention was based on evidence that it is first and foremost acceptable and suitable to the country’s needs and culture; that it will address a real unmet need; that it is feasible based on test cases either in the country or elsewhere; that it has a potential for scaling up for impact; that it can be sustained; and that it can be done at a comparatively reasonable cost.

In its approach to delivering the results that USAID wanted, the BHS team relied on its local and national partners and involved them in every step of the process, from needs assessment and prioritizing, to planning interventions, selecting implementers, execution and evaluation. Some of the most visible and tangible contributions are those related to infrastructure and it is likely that if some of the Yemeni partners / beneficiaries are asked about what significant contributions BHS has made, they will probably point to those. However there are many more contributions that should be considered including the following few.

1. Community Midwives Pre Service Training

To assist the MOHP in increasing the number of trained providers BHS supported the pre-service training of 344 community midwives in the last 5 years. The training took place through subcontracting the High Institute of Health Sciences (HIHS) in Sanaa and the Amin Nasher Institute in Aden, each of these overseeing their respective branches in the various governorates. Students must complete middle school to be eligible for the 2-year certificate program, which qualifies them as community midwives. The training takes place at the Institute with practical training at selected hospitals and health centers.

BHS selection criteria for trainees differed from those of other partners that supported the training of community midwives in that it was based on vacancies in specific health facilities and

villages, on MOPHP intentions to staff targeted health facilities in the focus governorates and on high probability that upon graduation, each trained midwife will be employed in the location from where she was selected. BHS, in cooperation with the Health Office and the Health Institute in each targeted governorate recruited candidates from the villages where there are existing health facilities that did not have qualified midwives. The likelihood of finding employment at these clinics once they graduate was much higher than if they were recruited through a wide open process which tends to advantage candidates from large cities who are less likely to accept work in the remote areas where they would be needed.

BHS implementation of the training contributed to developing and strengthening the existing training capacity. Yemen has a network of vocational training institutes for health that includes one such institute in each of four out of the five target governorates (Al Jawf has none). In addition to covering the costs of tuition and student living expenses, the BHS support provided an opportunity for these institutes to have better trainers, better training equipment (including modern demonstration models) and classrooms. BHS also hired its coordinator in each governorate with the specific requirement that she is a midwife with training qualifications (master trainer) so that she can monitor the training throughout the two years to help solve any problems along the way – and there would be many such problems in some cases: lodging conditions, food rations in some cases, parents concerns about cultural issues, transportation, materials, making up missed school days due to extensive national and local holidays, setting up extra practical training, etc. The reliance on existing schools to provide the training was based on their expertise and demonstrated ability to execute this task and has contributed to strengthen them and improve their capacity, whereas other interventions by other development partners sought to create their own programs which would disappear as soon as the project ended and shunning the institutions that the GOY and local authorities have set up specifically for this purpose would send a negative message to the host country.

BHS involvement in pre service training addresses a huge need for qualified health providers (especially female) to meet the demand of the reproductive health services; it is an important investment that has long term implications and impact. It is also very appropriate that the pre-service training intervention is integrated within USAID/BHS plan to improve access to health care services. The most obvious benefit is that midwives who graduate will right away find the clinics they will be working in have been renovated and equipped and will provide a suitable working environment for them to deliver proper services. BHS would also work with national and local health authorities to ensure that graduated midwives employment is part of the plans they agreed to implement. Furthermore BHS was able to develop additional solutions by encouraging midwives to establish their own private clinics so that the onus is not always on the government to provide employment. By the end of 2010, in Al Jawf governorate there were 30 midwives working in their own established clinics after graduating from the Institute in Sanaa, these clinics becoming a reliable network of service providers for thousands of women that comes after years of investing in refurbishing government clinics have produced little or no

results in terms of improving access as corruption and tribal conflicts made progress impossible in the running of government services.

Investing in the pre service training of community midwives like all investments in human resources is an important asset in a country's capital, but the training of community midwives has some added characteristics:

1. It contributes to increasing the availability of skilled providers to provide safe deliveries and thus reduce maternal and neonatal deaths and improves health access in general
2. It promotes women's participation in provision of services and raises women's status, one of the essential conditions of change and development.
3. It creates job opportunities for women, raises their family income and thus improves their economic status
4. It creates even more jobs and strengthen capacity building institutions in terms of the schools that are needed to train midwives

The country's goal is to have midwives available in at least 90% of all health facilities in Yemen as a primary condition which prepares such facilities to provide RH services. Similarly the country's goal is to have one trained midwife for every village (or approximately 1/5000 people) and thus increase the proportion of deliveries taking place with the skilled attendance of trained midwives. There is still a need to train thousands of midwives in the next few years. The deployment of these midwives is an important consideration along with planning to train more midwives and should be reflected in new initiatives to support midwifery in fixed health centers on a 24 hour basis, in mobile service delivery and home based services, and in developing private practice clinics run by midwives.

Future trends and needs:

- Higher grade of midwives (adding a third year to the curriculum, updating the curriculum and the practical training
- Supervisory midwives: one year training for experienced midwives
- Training to prepare midwives to carry out new tasks in their job description as amended by the MOPHP in 2009: such as IUD insertion, implants, prescribing drugs for PPH, etc...
- Continuing education: mechanisms to enable midwives to constantly improve and update their knowledge and skills, such as scheduling continuing education courses at hospitals and health centers, encouraging self-learning programs.

- Accreditation and certification issues: there are still issues to be resolved so that trained midwives receive recognition and equivalency of their diploma from the GOY relevant civil service authorities
- Building training capacity at the Health Institutes - increase capacity in the girls dorms, transportation for students, classroom quality, teachers training- and at the practical training sites – training of trainers, adding on site coaches dedicated to the trainees, monitoring the quality of practical training.

2. Mobile Medical Teams

Given the scarcity of qualified doctors and midwives to serve the large number of health facilities available in rural governorates the idea of having mobile teams that serve several health facilities on a rotating basis can often be the only viable opportunity for many underserved areas to have a decent health care. The BHS experience was inspired from successful programs in Tunisia in particular where mobile teams were a key ingredient in bringing family planning to areas and populations that otherwise would have been deprived of these services. In Tunisia the mobile teams were staffed with midwives only, since midwives were harder to find than doctors in remote areas and as female providers were more likely to be accepted by women for RH services.

The Mobile Team concept is not the same as that of a mobile clinic which is a self-contained unit where services are provided inside the vehicle itself. The BHS Mobile Team is made up of one physician, two midwives and a driver, they operate a special purpose vehicle which is a four wheel drive double cabin pick-up truck fitted with a large box in the cargo area to safely carry a full complement of clinic equipment. The list of equipment was formulated by BHS in consultation with health providers to enable the mobile team to provide basic and essential health services for women including antenatal care (ANC), post natal care (PNC), delivery, gynecologic exams and general health services. Child health includes IMCI and vaccinations. Men are provided with general physical exams. Mobile teams also provide ultrasound examinations, ECG services, first aid and simple lab tests. The health office treats each mobile team as a health center for the purpose of regularly allocating to them a quantity of medicine and essential drugs and supplies. The team travels every day of the work week from its base station (normally the governorate hospital) to an assigned health unit or center according to a pre-established schedule which has been shared ahead of time with the health and local authorities in the targeted locations. One day a week is set aside for the team to complete its record keeping, maintain its equipment and the vehicle, to renew its medical supplies and in some cases have a training session by BHS staff who monitor the mobile teams. Once at the health facility the team will unload their equipment and provide their services with the help of the local clinic staff which is usually limited to a Morshida (outreach worker) or a health worker or sometimes a medical assistant. The local staff gets some added training and experience in the process. The clinic itself

has often benefited from additional equipment and furniture that BHS provided which improves the health facility's set up (waiting room chairs, tables and desks and cabinets, examination beds, etc). The team records the services given as part of the health facility register and keeps a copy to send to the BHS project for monitoring.

Linkages with the local communities are established through the health office and the BHS coordinator whose job is to inform local communities and authorities of the mobile team schedule and of any changes. In many areas where BHS has worked on community mobilization with local groups and religious leaders, the medical mobile team has benefited from the support of such groups and religious leaders to raise awareness and prepare the population. Each vehicle carries a TV, video and set of films and educational materials so that educational sessions can be provided. The vehicle itself is a moving display of educational messages permanently painted on its sides (some of the 20 posters that BHS produced on family planning, prenatal care, preparedness for delivery, infant care, breastfeeding and nutrition).

The mobile team members received training from BHS to acquire or strengthen their clinical skills and received an orientation tour with a successful mobile team to share the experience before starting their field visits. The early teams were sent on a study tour to Tunisia to observe mobile teams there. Each mobile team is assigned by the Governorate Health Office to cover a number of health facilities within a given district or more often a group of districts. By the end of the BHS project there were 21 teams in the five governorates and each could cover up to 20 health facilities within a month. In most cases however, the health offices would reduce the number in favor of having more visits per month to each facility rather than a single monthly visit. This is the right approach to increase access while improving quality as weekly visits are more likely to result in lower case loads, better follow up of patients and more availability to catch cases with days of onset of a health problem so clients do not have to wait longer before receiving attention.

The Mobile Teams experience was very well received and was successful in many respects:

1. It is an example of a shared program where the MOPHP provides the staff, manages the program (supervision, scheduling etc,) and provides drugs and supplies for the team, and BHS provides the vehicle, equipment and running costs.
2. It is an example of integrated service provision as these teams provide all primary care services as well as curative services and not just RH.
3. It is conducive to improving the functioning of existing fixed facilities due to the impact of the mobile team on local staff; The mobile teams were tasked with strengthening the relationship between the community and local health providers, increasing the service utilization rates at the existing facility, monitoring the existing staff performance and facility needs, assessing the community health requirements and determining the frequency of mobile team visits needed to the targeted villages.

4. It is less expensive to establish and run than fixed facilities
5. It is a versatile solution that can be used when needed to reply to emergencies and disasters
6. The results for the last few years in terms of numbers of clients served have been spectacular and far superior to the volume of clients seen in facilities where there is a permanent and full staff.

Trends and improvements:

- Set up statistics recording for the team separately from the health facilities , in order to account for this activity and justify for the MOPHP (and ministry of finance) the allocations of specific budget line and drugs
- Experiment with different schedules to cover more districts
- Increase numbers and frequency of visits (more teams)
- Put more effort in recruiting female teams
- Improve maintenance and reduce abuse and waste
- Increase linkages with community groups and RLs including ability to have local groups monitor performance and results and report absence, irregularities, problems etc.
- Better coordination with health education and community mobilization
- More supervision from the Health Office RH staff
- More attention to the clinics staff visited by the mobile team: involve them in training and follow up of cases.

3. Scaling Up Best Practices (BP):

This activity of the BHS project started with the identification of a Yemen country team which was invited to attend the Bangkok meeting on “Scaling-up High Impact FP/MNCH Best Practices” in September 2007. The team was sponsored by a few Development Partners and USAID and had members from MOPHP, Yemeni NGOs and 5 governorate DGs (Lahej, Aden, Taiz, Ibb and Amran). The Bangkok meeting itself was funded by USAID and organized by ESD in collaboration with other USAID partners including WHO. The Yemen country team participation included the development of an action plan and proposal presented at the meeting which was subsequently approved and funded in two phases as the plan itself had proposed: a first phase was implementing the best practices in Al Sabeen Hospital in Sana’a as a pilot (2008)

and was followed by the second phase where five hospitals in the 5 governorates that were represented in Bangkok joined in the scaling up of the Best Practices.

The selected best practices were five initially: (1) Essential newborn care/infection prevention, (2) Kangaroo Mother Care (KMC) for low birth weight newborns (3) encouraging immediate and exclusive breastfeeding, (4) postpartum FP, healthy timing and spacing of pregnancy (HTSP) and LAM counseling, and (5) Vitamin A supplementation for women. Early in the pilot phase another BP was added consisting in immunization of newborns and in the second phase there were two more added: neonatal resuscitation and the active management of the third stage of labor (AMTSL) to prevent post-partum hemorrhage (PPH) which is responsible for a large proportion of maternal deaths.

Phase I was completed in Al Sabaen Hospital and the post intervention assessment showed excellent results despite the staffing and lack of resources at this hospital.

- Postpartum FP/HTSP counseling: from 0 to 73%
- Post Miscarriage FP counseling: from 0 to 33% (within three months – started late)
- Immediate Breastfeeding: from 15 to 79%
- Counseling Exclusive Breast Feeding and LAM: from 0 to 73%
- Proportion of all eligible women who have received the recommended dose of Vitamin A rose from zero to 97%.
- BCG tripled from its previous level

Phase II involved expanding the same BPs to major hospitals in Aden, Amran, Sa'ada, Lahej, Taiz and Ibb.

- In January 2009, these hospitals and Al Sabaen formed an Improvement Collaborative, which is a model used successfully for achieving rapid change.
- A plan of action was developed including learning sessions and timetables for action
- MOPHP appointed an IC leader, an IC coordinator and QA expert
- Best Practices Technical Training was rolled out to train providers from all targeted facilities
- Data were collected on a quarterly basis on a set of indicators. New counseling rooms were set up where none existed before, hospitals improved their Infection prevention practices, mothers' booklets were being used in hospitals; 75 to 81 % of postpartum women delivering in the hospitals were receiving written and oral information about immediate and exclusive breast feeding, 73% of women were receiving Vitamin A

before discharge (despite some hospital having stock outs); 47% postpartum and post abortion women receiving written and oral information on PP/PA FP with 17% of PP and 5% of PA receiving a contraceptive before discharge

- The Ministry of Health / Population Sector endorsed scaling-up best practices in its work plan in 2009 and expanded its involvement in 2010
- A Best Practices Subgroup of the Ministry's Reproductive Health Technical Group was established to advise and assist in the BP efforts.

Phase III started in 2009 to scale up the 8 BPs in the five USAID targeted governorates; BHS trained 24 trainers and trained representatives from these governorates on working as an improvement collaborative, whereby they formed quality teams and have elaborated a full plan of action. This phase began to target 8 large hospitals, 50 district hospitals, 75 health facilities providing RH (normal delivery) and up to 150 midwives providing home based deliveries, with an estimated target of 746 providers to train. The same phase would also include integrating the training curriculum in the Midwifery schools syllabus and training trainers.

While phase III was in mid-course in 2009, the Yemen MOPHP began to expand it to other non USAID governorates and preparing for a nationwide scale up. In March of 2009, the Yemen experience was showcased by three plenary session presentations at the Bangkok technical meeting, the Yemen team was the largest team fielded by any country thanks to the support of several donors in Yemen led by USAID and sponsoring Yemeni participants from most of Yemen governorates. The subsequent Yemen proposal for scale up (phase III) was approved by ESD and funded through USAID/AME bureau and was the largest grant in the ESD/ AME program that comprising India, Bangladesh, Pakistan, Nepal and Jordan. In April 2010 the MOPHP held a national conference in Aden to follow up on the Bangkok proposal and launched the full scale up to all governorates. This involved 13 new governorates with three facilities from each one and 10 governorates where the BPs have been introduced presenting plans for adding 5 more facilities each to implement the BPs. A total of 89 facilities were targeted and an estimated 900 staff would be reached through training and orientation activities including health providers from involved facilities, managers of reproductive health services at the health offices in governorates and districts and governorate health leaders.

At the project closing in December 2010, the Best Practices activities had achieved their target by reaching all governorates with over 130 health facilities in 23 governorates. The initial wave of training has involved members of the providers team in each of these facilities.

With regard to training midwives, BHS supported the YMA to complete training session reaching its practicing midwives. All graduating midwives in 2010 in the five governorates received an additional course from BHS trainers on BPs. In total for 2009-2010 alone BHS trained 919 midwives inclusive of those receiving BP training.

In anticipation of the need to follow up this activity beyond the imminent closing of the BHS project, ESD agreed to continue supporting the activities until April of 2011 through Pathfinder International in Yemen and in coordination with the USAID/Sanaa health program and projects in place so that the full program under Phase IV is implemented.

This activity represented a great success for several reasons including the following:

- BPs are evidence based practices that are selected only after careful scientific research worldwide and are very basic to the improvement of quality of services. They are selected only because they have shown a very significant impact on the problem they are supposed to address whether it is maternal mortality of neonatal deaths or infant survival.
- The scaling up of BPs in principle requires very little investment, and consists primarily in integrating the practices in the country's service protocols and training providers on these practices, some of which are very basic and nearly effortless.
- The benefit of some of these practices goes beyond the reason for which they are introduced; for example some of the practices like breastfeeding and post-partum family planning require the administration of proper counseling. The establishment of a counseling function in itself will serve the clients in all aspects of her experience at the facility and contributes greatly to the overall quality and impact of the care provided.
- The limited number of BPs is easier to remember than a full set of standards of care and guidelines as they usually exist in national guidelines; when the BPs are part of the national guidelines, the mechanisms they establish for quality control and improvement will also facilitate the adoption of a gradually more complex set of national standards.
- The introduction of BPs often uncovers essential needs and issues in the health facilities and draws the attention of national and local managers to these issues which need to be addressed properly to improve the performance and services of the facility.
- Through the use of a model of change such as the "Improvement Collaborative" which was introduced in Yemen as part of the scale up, the change is totally driven by the providers and managers of the facility (not by donors) and is sustained through exchanges and collaboration between providers and managers from different facilities as well as by the participation of national level and governorate level managers.
- Training is built into the process through learning sessions organized by the participants according to their needs and supported by the national health establishment and the donor project..
- A great aspect of the assistance provided by BHS is in its promotion of total ownership by the Yemeni partners especially the MOPHP. All decisions, big and small, including the selection of sites, practices to be included, timing of activities, etc., have been made

by the Yemen team. The MOPHP (Population Sector) is responsible for initiating all contacts and correspondence with health facilities and health offices and for monitoring results so it is fully an MOPHP driven activity.

- From the standpoint of USAID –GOY relation, it is a unique example of a donor intervention that has been scaled up nationwide and where USAID impact has reached every governorate and has served the strategic goals of the host country rather than remained limited by the donor’s own agenda of focusing on a certain number of geographical areas of interest. This was helped by the fact that the funds were needed and used were from central USAID funds through the AME bureau but the approval of the Sanaa mission and its positive support were essential to keep the scale up drive in motion.
- The experience has succeeded in creating champions among national and local providers and managers for quality improvement through Best Practices. The MOPHP has adopted the scale up as a national priority; it has included the scale up in its annual plans, integrated the collection of monitoring data in its regular data collection and established mechanisms for monitoring performance and problem solving.
- Our assessment of the success of this activity was also shared by the USAID MTR review concluded in July 2009 which concluded: “BHS team should be commended for moving ahead with this activity with ESD support and ESD is applauded for providing assistance and technical support to the BHS (an associate award) to implement this activity as well as other activities such as the religious leaders’ training and the safe age of marriage initiative. This collaboration between a Global Health project and a USAID/ Mission bilateral project to pilot and implement innovative programs serves as a good example of collaboration to improve country programs and advance global learning. The selected Best Practices represent key evidenced-based, low cost, high-impact interventions that are usually neglected by health providers. These are being promoted by the global community and recommended by the MCH and PRH divisions at USAID/W as essential maternal, family planning and newborn care interventions that should be scaled-up”.

Lessons learned and next steps

- Success in scaling up the Best Practices is due to several elements being present at the same time and working well together: the host country leadership and commitment; the donor support and the national project in place (BHS) to function as a catalyst for rapid change. The selected best practices provided their own appeal as they fit in with the MDGs and the country’s pressing needs and priorities. The fact that the BPs were part of the BHS project activities and supported by the USAID/Sanaa mission helped the scale up because it also addressed needs that are essential conditions for the scale up but not normally addressed under the BP intervention or with USAID/AME funds. This is where

project funds were used to improve the infrastructure in the Al Sabaeen hospital and in facilities across the target governorates as many lacked essential equipment and supplies even for infection control. The introduction of the BPs also improved the quality and potential impact of the USAID/BHS project intervention as it gave more programmatic and technical content to what was essentially an infrastructure and capacity building program.

- The scale-up to all hospitals and health centers providing RH services is well underway and need to be supported further until the new practices become fully integrated in the normal standards of practice and part of the routine that providers go through. Maintenance of the new behavior requires strengthening of functions such as of monitoring, supervision, data collection and continuing education. In practice this means having funds available for a USAID project to continue providing adequate follow up.
- The scale-up efforts should be expanded to include training and quality improvements in essential and emergency obstetric and neonatal care and in contraceptive updates and counseling. BHS staff provided additional training in these areas in 2010. There were 259 health providers trained in neonatal resuscitation in 2010 (as compared to 12 in 2009), and 358 trained in essential and emergency EmOC and in FP contraceptive updates, all of them selected from the facilities where BPs were being implemented.
- The scale-up program has uncovered many areas of needs. It would make sense for the MOPHP with international assistance to move forward to correct these deficiencies. Governorates where the baseline was conducted have developed plans of action in response to the results of the baseline studies. The full reports of the studies conducted in the target governorates in 2010 were shared with USAID's CLP with the hope that they will direct some assistance toward implementing them.

4. Institutional development and support

a. Yemeni Midwives Association and establishing private midwives

The YMA was established on September 2, 2004, with financial, administrative and technical autonomy although in Yemen all NGOs are monitored closely by the Ministry of Social Affairs as well as by the technical ministry of relevance and to a large extent NGOs are always held in check by the official establishment. The USAID Yemen Partnership for Health Reform (YPHR) project supported its establishment then BHS took over the role and supported the YMA with office space, equipment, staff and funding for field activities.

The YMA aims to promote and strengthen the midwifery profession in Yemen. It seeks to upgrade the RH/FP/MCH skills, professional status, and career opportunities of

midwives. Both YPHR and BHS have provided various capacity building opportunities to YMA members since its establishment to upgrade business planning, hands-on training and supervision skills for its members

As a national institution the YMA has been instrumental in implementing a successful program to help local midwives establish their own private practice. Just 2 -3 midwives were selected at the start from each of the five governorates assisted by USAID, given training in business skills, community mapping and RH/MCH/FP, assisted in refurbishing a place within their home or their family's home, given essential equipment and furniture and assisted in facilitating administrative procedures to allow them to practice.

The experience has been a great success for many reasons:

- Service statistics by the private midwives were very encouraging and in many cases far superior to larger and more costly public health facilities
- the costs are minimal compared to what it costs to establish and run a health unit or a health center, in addition there are only initial start up costs involved, afterwards it is a private business that will sustain itself from revenues but some investment in follow up and support would remain necessary for training, supplies and general quality monitoring and improvement.
- the private clinic is not subject to the arbitrary intervention of local tribesman who often close public clinics whenever they have an issue with the government
- The private midwife is available on a 24 hour basis
- The linkage with the MOPHP has been built in and midwives are supposed to get supplies from the MOPHP (basic drugs and FP contraceptives - vaccines are being considered.
- Midwives refer cases to the health centers, also work at the health center during normal hours and complement the health center; in some cases the DG has requested that they work at the health center for their own account after normal hours instead of opening their separate clinic (but the example did not succeed because the clinic manager who owns the clinic land has objected unless he gets a share of the revenue)
- This is an appropriate solution to the difficulty that many midwives have in finding employment in MOPHP clinics and reduces the burden on the government to employ every midwife who graduates;

Lessons learned and next steps

The experience was expanded in 2010 by BHS to include another 56 midwives. Half of the new group of midwives were selected from all districts of Al Jawf governorate where

the public health facilities and the government health office are no longer functional due to the continuation and worsening of the security breakdown in this governorate.

- Work on improving community perception and support from local authorities especially the health authorities o t hey do view the midwives as agents to increase access (both geographic and time wise) increase choice (private in addition to public) and create opportunities for services the public clinic may not provide (home follow up). The midwives are sometimes viewed by health officials as competitors who will drive clients away from the public health services, the relatively small income they will make also attracts attention and envy from poorly paid government workers.
- The appeal of the midwife is that her clinic is the closest thing for a mother to delivering at home, the cultural acceptance due to privacy and lack of unnecessary exposure to long travel and to other people especially men. Public clinics could also adopt some measures to make their own services more appealing by providing midwives in the public clinics with more latitude to make improvements (public clinic managers are all males and often unqualified).
- Improve the support from institutions such as the YMA, through grants to the YMA to provide on the job training, conduct evaluations, conduct market research and mapping to identify new opportunities for expansion, develop additional plans for more midwives deployment.
- The midwives in private practice program, relabeled “community based midwifery services” can be further expanded and linked to other programs such as the voucher system, franchising, small credits for women run businesses, providing accreditation and continuing education, etc and it is possible to work on integrating the business and mapping modules in the pre-service training given at the HIHS and make the assistance in refurbishing and equipment part of a self sustained small credit program.
- USAID projects can support health training institutes for midwives integrate in their training the private business module including skills in mapping and outreach
- Improve the referral relationship between midwives clinics and referral centers to provide a good back up to the midwives for the problematic cases they may face and avoid accidents. Also help the midwives establish community transport schemes and Alert Villages programs (to raise awareness about women in pregnancy and labor who need help).

b. National Safe Motherhood Alliance (NSMA)

NSMA is an institution formed with the support of BHS which brought together government agencies, NGOs and individuals working in support of safe motherhood with a focus on information, advocacy, policy development and monitoring. Within the efforts to support maternal issues, the Higher Council for Motherhood and Childhood, along with other interested parties, initiated the “National Safe Motherhood Alliance”. The Alliance is based on voluntary participation of the various stakeholders working in the many fields with relevance to the cause, and is based on the successful model of the White Ribbon Alliance for Safe Motherhood, an outgrowth of the global Safe Motherhood Initiative.

The global White Ribbon Alliance represents an international movement that, although initiated as an informal network, is now a recognized international NGO. It is composed of individual and organizational members from nearly 90 countries; fourteen countries have already started their own National Alliance.

The NSMA is open to individuals as well as to governmental, nongovernmental, and international organizations and institutions, including professional associations, that work in areas related to Safe Motherhood. Members may join either in their independent capacity or as a governmental, non-governmental or international organization.

NSMA was launched in July 2007 and has since grown very active and was awarded a substantial grant from DFID through the WRA.

NSMA is a success story in that it provided an institution dedicated to Safe Motherhood built from the capacities and mandates of existing institutions and thus facilitated synergy and coordination, created strength through building alliances and focused on a need that is not addressed elsewhere which is advocacy. NSMA was active in the fight for a public health law, in the fight to adopt a legal age for marriage and prevent marriage of under-age girls.

Next steps

NSMA can be a partner for health service projects and provide assistance in advocacy and public awareness. Support to the NSMA should encompass helping it to establish safe motherhood committees all over the country, develop a program of Alert Villages (example of India) and develop mass media programs to educate about age of marriage, women’s health and rights, girls education, reproductive health, preventing gender-based violence etc.

c. Yemeni Public Health Association

The YPHA was launched in 2007 with the participation of several health professionals from several regions of the country and with support from BHS to hold its general

assembly and draft its strategic plans and work plans. The YPHA immediately started looking into the Public Health Law which was at the time being examined at the parliament. The YPHA provides public health professionals of all categories with an opportunity to support public health causes in Yemen and assist health professionals in focusing on public health issues and conducting voluntary activities to improve the public's understanding of these issues as well as advocate with policy makers for their support to solve these issues.

Next Steps

- Support the YPHA to multiply membership drives across the country, encourage the development of training and continuing education activities that will provide the membership with the feeling that their organization provides them with a service worth paying a subscription fee.
- Begin to develop the capacity of the YPHA to act as a purveyor of specialized technical advice and expertise to projects and organizations on major public health issues to strengthen the organization's image and "niche" as a specialized organization with expertise in Public Health.
- Encourage the YPHA to develop annual plans and targets in each of its areas of action: advocacy, training, general awareness, research etc.

5. Health Education and Community Mobilization

A Community Health Education Manual was developed with BHS lead in coordination with development partners (UNICEF, WHO, UNFPA and GTZ) and MOPHP to answer the need for a reference source that harmonizes messages and improves consistency and quality of information. The 42 health messages in the manual represent a consensus agreement on the priorities in health among all partners and reflect the latest knowledge in RH, FP, nutrition and immunization knowledge and protocols, are worded in simple language as well as illustrated to suit cultural values, and were field tested and improved before final production.

The CHEM is an example of coordination and integration that should be emulated in the production of other similar products that the MOPHP needs for its programs for many reasons:

- Represents a consensus between development partners
- Integrates all needed priority messages in one package
- Harmonizes message dissemination and reduces inconsistencies and conflicting messages
- Is a simple tool that can be used by various levels of community workers
- Can be a framework for the production of a large variety of supportive educational and training products in many formats (following the example of "facts of life" produced by

several un agencies together and which has been generated in many formats and adapted for many audiences)

- Can be continuously improved as needed
- Reinforces health education as a key component of health care services which has not yet received full attention and is badly needed in country like Yemen which has a very low level of literacy and awareness.

Next steps

The CHEM has already inspired the MOPHP to work with religious leaders on producing a religious education book that uses the health messages and supports them with religious fatwas and arguments. This product was in the process of completion by the end of 2010.

The MOPHP also worked with the Ministry of Information and 14 radio stations to disseminate the 42 messages throughout the year 2010 in all the governorates. This program was supported by funds to the MOPHP from BHS within the annual plan of support to the Population Sector.

This example of donor coordination and integration should inspire donors and their projects to schedule more activities of the same kind that enable more products to be issued as a result of a joined effort such as for training manuals, films and field campaigns.

Funds should be identified for reprinting the CHEM after review to update its information and to continue training of volunteers and health and social workers in its use. Funds should also be identified to support radio and TV programs to disseminate these messages widely.

6. The Community Mobilization Groups (CMGs):

Multi-sector Community Mobilization Groups were formed in each of the five USAID target governorates by BHS to become the nucleus for carrying out community activities and coordinating inputs. Membership included representatives of the non-health sectors such as; the Ministry of Religious Affairs, the Ministry of Youth, the Ministry of Education, the Ministry of Human Rights, the Ministry of Agriculture and relevant national organizations such as the Yemeni Women's Union, the National Women's Committee. Governors issued the instruction to form these local community mobilization groups. CMG were later involved in the selection and recruitment of volunteers and educators from NGOs and government (90 per governorate with the youth [boys and girls] who were trained by BHS on the community health education manual. Community activities are carried out in coordination with the MOPHP and BHS.

The CMGs and the trained educators and volunteers follow the BHS-developed activity protocol (two group meetings and six field activities per month in five districts within the target governorates). The CMG has linkages with the Religious Guidance educators who help disseminate health messages and reach a wider range of communities through the mosques, in

that the Awqaf representative and leader of the religious guidance activity is also a member of the CMG.

Future trends

Linkages with governorate based NPC committees, NSMA, linkages with services, linkages with health facilities committees. Expansion to more districts

7. Involving Religious Leaders as partners in health education

Since 2007, the USAID Basic Health Services in Yemen has embarked on a successful program to include religious leaders and faith-based organizations, recognizing their influence and importance in the lives of communities. Activities that are supported through religious institutions have the potential to promote and sustain positive changes in RH/FP attitudes, social norms and behaviors among community members.

This idea is not new, but the implementation was designed to empower religious leaders and their organizations in contrast to approaches that “trained” religious leaders, told them to support family planning and left them to do “their duty”.

BHS in coordination with the Ministry of Awqaf, the Foundation for Social Guidance, an NGO, and local authorities selected religious leaders and consulted them on how best to impart training skills, knowledge about health and about religious arguments in support of health to selected religious preachers and educators. A partnership was set up between health specialists and religious scholars to build a knowledge base that will be used in training and in which religious scholars will identify religious texts and provide interpretations to support health messages. Health specialists provided scientific and epidemiological information to raise the awareness and understanding among their religious counterparts about specific issues such as healthy timing and spacing of pregnancy, safe age of marriage, prenatal care and postpartum care and the reduction of maternal and neonatal mortality. In turn the religious scholars examined their texts for what will allow them to support the calls for action that result from the health issues identified, such as for example to use a contraceptive to prevent an unwanted pregnancy (as contrasted to the religious belief that this is against the will of God for people to procreate) or for a mother to see a doctor (even a male doctor) or for a child to receive an immunization to prevent common diseases (as contrasted with accepting them as the will of God). A curriculum was developed in which the corresponding arguments and contents were side by side and where trainers from both sides will handle the materials they are best at handling.

Religious leaders training sessions were completed for a total of 126 male and 40 female trainers. BHS agreed with them on a regular schedule of monthly activities where they integrate health messages in their sermons and hold 4 community meetings per month on specific RH subjects they were trained to address. Quarterly meetings are held by BHS with the RLs in each governorate to assess results, discuss activities and issues and provide more information and training as needed.

Through this program BHS completed the preparation of a reference book on religious opinions in support of reproductive health and three new brochures targeting the audiences of the religious leaders, the first with information on breastfeeding, the second with information on the methods of family planning and the third with information on risks of early marriage. The brochures were specifically developed on request from religious leaders.

Results to date show that nearly half a million people were reached through community meetings where RH messages were disseminated; RL participate with the BHS staff in regular planning and evaluation meetings and receive the logistic support needed for them to continue their involvement.

Research was conducted to assess what role the trained RLs were playing as purveyors of information on the health subjects and found them to be consistently mentioned as a highly trusted source of information on RH/FP including breastfeeding. In districts where the RLs were not trained, they were not mentioned as often as a source of information. Basically the role of the RL is expected to be one of projecting Islam as a positive source of legitimizing healthy behaviors and reassuring the public that there are no prohibitions from religion against using scientifically approved and safe health measures such vaccinations and contraception.

The success elements in this program were:

- Respecting the prerogatives and roles of the religious leaders within their discipline and their community and furthermore assisting them to strengthen their role and relevance to the needs of their profession and communities.
- Building an informed consensus among religious leaders on the health needs and priorities in Yemen and more specifically in their own communities, as a basis for their involvement in advancing the progress within their respective communities toward meeting these priorities;
- Collecting and disseminating a body of religious knowledge and concepts from religious sources in support of the selected health priorities;
- Forging partnerships with religious leaders and their institutions; supporting them for undertaking local health awareness activities for community awareness and involvement around the selected health topics.
- Providing comprehensive training to religious leaders in the selected technical health areas to enable them to be more knowledgeable and skilled in addressing them within their work with the community;
- Developing action plans with RLs for their involvement in promoting selected health messages within their community, providing them with logistic support to carry out their

plans; monitoring their progress and providing more help as needed, answering questions and solving problems that arise.

- Applying a realistic and effective mechanism for providing logistic support for the work of RLs, for monitoring results and using lessons learned for scaling up to other communities

Trends and future steps:

- Monitoring and evaluation of impact on attitudes and behavior (KAP or DHS)
- Improve the linkages with service provision and health facilities and involve RL more closely in community meetings and local councils as advocates and monitors for health
- Expanding the activities to more areas by adding to the numbers of RLs trained and providing more logistic support for outreach activities.
- Achieve more integration with community mobilization activities
- Increase the role and numbers of Women religious educators
- Develop additional targeted interventions to improve men's roles and contribution to RH with more messages focused on men taking a more active role in RH and not just supporting women to do it.

8. BHS Branding Strategy and Marking Plan

According to USAID instructions this project was branded as the Basic Health Services (BHS) project. BHS followed a communication strategy which has proven successful in promoting the project as part of the USAID health assistance to the government of Yemen aiming at supporting the MOPHP in particular achieve its goals in reproductive health and maternal and child health.

BHS activities were documented, publicized and reported in conformity with USAID graphics and communications guidelines and BHS also coordinated with relevant staff from the US Embassy and comply with communication directives from the Embassy.

Communication strategy

Documenting and publicizing the positive impact of USAID assistance on the lives of the Yemeni people the BHS team has created more acceptance and cooperation toward project interventions, including those that challenge established attitudes and practices through

community education and mobilization. When security in the field was suspect, BHS staff were able to travel to areas considered unfriendly and were always well received and USAID property marked with USAID logo has been respected and appreciated. Vehicles and equipment have also been marked with USAID logo to make the Yemeni communities and officials aware of this US assistance even though this requirement is normally waived. A key element in implementing this strategy is the fact that BHS has a professional journalist on the staff who travels with technical people to document activities and who arranges for media people to have access to activity sites and to have all needed information on the project. National and local newspapers regularly cover all activities and events and many feature articles have been produced on major components of the project such as mobile teams, emergency obstetric care units, religious leaders training, private midwives etc. BHS also regularly invites to its events the Health Education Center of the MOPHP which has among its tasks to film activities where the minister and his deputies are involved and to send it to the national TV for broadcasting.

Within the communication and dissemination strategy of the global ESD project, the USAID Yemen/Basic Health Services Program has also utilized international venues to make BHS results more visible on the US and international scene.

The Basic Health Services project team Pathfinder and the ESD team made use of electronic media to further disseminate information about the project, its accomplishments, success stories and lessons learned. This took the form of publications on the ESD and Pathfinder web sites, the Yemeni MOPHP web site, the USAID electronic venues for publicizing USAID assistance as guided by the USAID Mission, through group mailings as well as traditional media such as brochures, newsletters, local and national newspapers, TV and radio and at local, national and international conferences and meetings.

The Basic Health Services Program had several types of information products or activities geared toward reaching specific audiences to inform about the project and its results. These audiences include:

- USAID , Pathfinder and implementing partners within the ESD project;
- Yemeni partner institutions and Yemeni officials including NGOs, Ministries, Training institutions, Governorate level authorities, and Development Partners in Yemen.
- Professional audiences especially health providers including doctors and midwives linked to the project, targeted health facilities managers, selected teachers and school directors, University and health teaching schools connected to the project;
- The general public which can be reached through the media ; through distribution of appropriate materials during public events and in points of service places (clinics); and during information and awareness campaigns.

The following chart provides a summary of the communication strategy products that inform about the project.

Illustrative products within the Communication Strategy for the Basic Health Services Program

Item/Media	Content / description	Frequency	Language
Quarterly Reports	Progress report Mostly electronic Format as per M&E plan	Quarterly	English
Annual Reports	Progress report Mostly electronic Format as per M&E plan	Yearly	English
STTA Reports and staff trip reports	Electronic / uniform format includes trip activities, results and recommendations	Every trip	English
Project information flyer (1 page)	General information on project goals, general activities and expected benefits to population	Annually	Arabic/ English
Project information brochure (objectives, plan of action, activities)	Technical information on the project targets and approaches.	Annually	Arabic/ English
Project information video	Film showing project activities and how they impact real Yemeni people's lives	Once – at project mid-year	Arabic/ English
Project publications of educational nature (posters, brochures, banners etc.)	All products that are part of specific sub IR activities and target health facilities providers, users, communities etc...	As per activities plan for sub IRs	Arabic only

Marking

The following chart provides examples of the marking activities that BHS implemented.

Product	Description	Frequency	Language
Signage for Project renovation activities (clinics)	One permanent sign affixed at the front entrance and one temporary sign on access road to the site. (USAID, ROY logos, description of activity) (image 1)	One time only and as per activities	Arabic / English
Commemorative Plaques	Marble plaque affixed at entrance of newly built or renovated clinic (image 2)	One plaque, permanent	Arabic and English
Vehicles provided by the project to Yemeni partners	Logos of USAID “from the American People” affixed on the car in visible spot (images 3 and 3a)	Permanent sign, renewed during maintenance if mutilated	Arabic
Equipment distributed to clinics	Clinic furniture, medical equipment, midwifery kits etc. Labels purchased from USAID approved suppliers in the US, are affixed to visible area of the item (image 4 and 4a)	Sticky label, permanent	English / Arabic
Banners	During training events, conferences, campaigns, banners display activity description, sponsors and date; include USAID logo painted on plastic or cloth banner (image 4). TV news and newspapers usually will take images of these banners during reporting on the activity. (image 5 and 5a)	One or two per activity , one behind the podium and one at entrance.	Arabic and English
Posters	Posters will carry logos of the MOPHP and of USAID. Also other agencies / donors participating in producing the poster, if applicable. (image 6)	Printed on the poster	Arabic and English
Brochures / flyers /	As in posters, USAID logo and the	Printed on	Arabic /

guidebooks, publications, handouts in training or meetings	MOPHP logo will be printed on the front page (image 7)	front page	English
Films, electronic power point presentations	Power point presentations include Logo of USAID, films if any will also display USAID logo.	On title page and other pages	Arabic/ English
Training and promotional materials	Bags handed out to trainees with educational materials have USAID logos printed on the front. Completion certificate also display USAID logo. (image 8)	Printed permanently	Arabic / English

Following are some images of actual markings from BHS activities:

Image 1: signage on the road to a health facility



Image 2: Commemorative plaque at health facility from Catalyst (2004-05)



Image 3: Marking on Reproductive Health Services car, with educational messages



Image 3a: Marking on Health Institute School bus in Shabwa governorate



Image 4: clinical equipment marking



Image 4a: clinical equipment marking



Image 5: banner for a training activity



Image 6: collection of BHS produced posters on MNCH/FP



Image 8: certificate of completion of training



Sustainability of BHS interventions

Guidelines and training manuals were developed and or adapted in local language by BHS and training of trainers workshops conducted often to create a capacity within the health system for improving quality. Some of the training tools developed, adapted and disseminated by BHS include materials on the following:

1. Technical course for midwives “Reproductive Services and Maternal and Newborn Health”
2. Training on Reproductive Health for Religious Leaders
3. TOT on Reproductive Health for Religious Leaders
4. Clean delivery for home-based births
5. RH specific Counseling
6. TOT on generic and method specific counseling - training curriculum
7. TOT on generic and method specific counseling - training materials
8. Best Practices for Midwives at end of pre-service
9. Best Practices in MNCH/FP for Midwives
10. Best Practices training for Health Facilities staff
11. Training of Community Educators on Safe Age of Marriage
12. Mapping Skills for Midwives
13. Business Course for midwives
14. Mobile Teams Training
15. Training in health education and nutrition
16. Training of midwives in counseling for RH/FP pre and post natal care
17. Referral guidelines and training manual
18. Training manual for the community health education package
19. Improvement collaborative training- Jan 2009
20. Clinical skills (3 parts)
21. Healthy timing and spacing of pregnancies (HTSP)
22. PP / PAC in health facilities.
23. Balanced counseling
24. Safe age of marriage training manual
25. Neonatal care and neonatal resuscitation
26. Essential and emergency obstetric care
27. Ultrasound training for physicians
28. Protocols for obstetric care
29. Updates in contraceptive technology
30. Reporting and service statistics in hospitals
31. Comprehensive set of questionnaires for assessment of rh/fp services

BHS efforts in the area of institutional capacity building and strengthening helped improve the capacity of several Yemeni organizations which, as a result, are all the more sustainable and able to serve the needs of the country

1. YMA

2. NSMA
3. YPHA
4. YWU
5. RCS
6. Ribat NGO
7. Social Guidance Foundation
8. Health Training institutes in the governorates and Sanaa
9. MOPHP/Pop sector/ RHTG

The improvements in infrastructure and in human resources as a result of BHS interventions have contributed to building the capacity of the MOPHP in particular and represent long lasting elements that will be serving the health system for a long tome, these include

1. Upgrading hospitals and health centers
2. Building houses adjacent to remote clinics to attract and retain health providers
3. Providing state of the art medical equipment to strengthen quality in health facilities
4. Training health providers in pre and in service settings
5. Integrating counseling and health education in services
6. Deploying Mobile Teams
7. Establishing Private Sector Midwives
8. Building the EmOC infrastructure

BHS has made significant contributions to improve human resources within the health system especially in the target governorates particularly through training:

1. community midwives
2. community mobilization volunteers
3. religious leaders
4. health providers
5. media

Areas of incomplete achievements / wish list

In some cases, BHS fell short of achieving some of its planned activities such as

Water safety and hygiene:

- the USAID MTR in July 09 recommended that BHS drop this activity from their plan, BHS intended to distribute water filters to mothers in child health clinics and this reduce diarrhea occurrences and do the same on schools, in addition to accompanying education campaigns.

Number of facilities renovated:

- Out of 84 interventions planned in 2006 only 51 were implemented due to lack of funds and lack of a consistent and long term plan for funding project activities. Incremental funding a few months at a time does not allow a project to plan for large activities or ones that spread over a good part of a whole year.

Number of midwives in pre service training:

- BHS could not add more pre service training in the second phase (2009-2010) despite the need for it, because the 2 year study program needs at least a three year window and cannot be started and completed within a two year project life.

Immunization:

- BHS was not able to implement work on routine immunization, as a result of the MTR recommendation not to embark in new areas in 2009.

Nutrition:

- malnutrition is one of the most pressing problems in Yemen and no attention or resources were given to it in BHS mandate

Mobile repairs team:

- BHS planned to have one mobile team to conduct small repairs in health facilities but decided against it after feed back from MOPHP partners in the field. The small repairs are usually easily done by local workers and contractors and do not require a team from Sanaa to be sent at great expense; repairs of equipment always require the equipment to be sent to Sanaa to the shop of origin and cannot be handled by a BHS team. The unit would be costly and its results no certain.

Integration with PHC

- Integration with PHC at the national level was not easily done primarily because the MOPHP structure separated these functions and attempts at integration were only partial.

Mobile cinema:

- BHS was encouraged by USAID to support deployment of mobile cinema units in the governorates but the model used by the MOPHP (supplied by UNFPA) was too expensive to consider and eventually there were no funds to even consider cheaper alternatives after USAID made cuts in the budget

Publications:

- BHS provided publications for health providers as well for distribution to the public but even if these were significant, the need for more was far greater than BHS could accommodate within its budget. USAID requirements also limit the ability to print materials

KAP study at the end:

- A post intervention study to assess changes in people's perceptions would have been useful from an evaluation perspective but it was not possible to do in view of the security concerns on the governorates and it was estimated that the best source of information would be another DHS, which Yemen has been waiting for, and still waiting.

Geographic expansion:

- Many governorates would have provided an excellent opportunity for scaling up USAID efforts and successful programs because they have sizeable chunks of population and huge unmet needs but this was not possible due to USAID priorities and lack of resources.

Al Jawf:

- BHS could not do in Al Jawf what it was able to do in other targeted governorates primarily because there are no viable partners there to work with and the area is completely unsecure and run by corrupt tribal chiefs.

Conclusion and recommendations

In general, some of the key questions that need always to be asked remain the same ones, but in the particular case of Yemen these questions are all the more important to address because most development interventions seem to fail or have limited impact: what works and what does not? Is there a blueprint for success that can be applied? Why do projects fail anyway? Etc...

Based on successful activities to date and on identified gaps, the following are directions or activities suggested based on lessons learned.

- Scaling-up experiences that are now successful in Yemen (mobile teams, scaling up Best Practices and emphasizing higher quality in delivery of services in existing health centers, RLs, Community Mobilization Groups (CMGs), counseling (HTSP), education about safe age of marriage.
- Continue to improve physical facilities the way Catalyst and BHS did to date: Both of these USAID projects have taken into consideration the fact that Yemen actually did not need new facilities (despite calls in every governorate for a major hospital, which is a political issue more than a health one). In all the renovations and constructions that Catalyst and BHS did, there was not a single facility added, they were all improvements of existing facilities. Health facilities need such interventions not just as a one-time intervention but as a recurrent activity every few years; the more the interval gets larger the more substantial the repairs. There is no substitute for having an adequate facility that is also maintained. Providing the MOPHP with a maintenance system can be something to consider – we thought of mobile repair teams but we need to have something that the governorate health office itself can run efficiently and they can do it if there is a supervision system that feeds into a plan for intervention or if there is a communication between the health facilities and a governorate level focal point for maintenance which has a budget to work with (could be a contractor who gets calls for repairs from health facilities, checks with BHS for cost and reasonableness and gets approved to do it.)
- With the Health Training Institutes:
 - Expand and improve midwifery and nursing training: continue training of midwives using the BHS methodology of targeting health clinics that need midwives and recruiting the candidates from the clinic catchment area; examine needs of governorates so that there can be one midwife for every health facility (including health units, thus a midwife for every village practically). Support an added one year for midwives to be trained better and further including in IUD and other new tasks (MVA, emergency care...)
 - Introduce a curriculum for supervisory midwives to mentor, monitor and support clusters of midwives

- Introduce a curriculum for health facility managers and recruit candidates from local populations where the clinics are.
- Addressing new targets geographically (expanding current interventions to new governorates) and population groups (youth including school children, vulnerable groups such as refugees and displaced people, services for women in places of work or training)
- Moving horizontally with health to integrate other health concerns in addition to RH/FP/MNCH, i.e., progressing toward a sector-wide approach (immunization, nutrition, child and adolescent health).
- Non health sector based programs with selected ministries and NGOs (RL is actually one of these, can expand to teachers, social workers, literacy educators etc.). Yemeni Women's Union is a great candidate for joint programs for their membership, including supporting them have their own private women-run clinics.
- Introducing new activities and programmatic approaches based on gaps in current interventions:
 - Media and advocacy: working with national and local media to improve production capacity, including local radios. Provide training and increase ability to produce new programming focused on entertainment and education that integrate development messages
 - Strengthening policy: working with MOPHP and relevant agencies to address gaps in policy and create a more favorable policy environment for promoting health development goals
 - Improving management capacity and integration: MOPHP capacity especially Population and PHC sector can be improved, better coordination mechanisms can be established leading to integration, most importantly set up a working supervision system and begin to improve data collection, analysis and use for sound management. Part of the problem in management is that the facilities' managers are weak; facilities have no budget to speak of, get no support for management and are not managed or supervised in order to have targets and produce results. To assist facilities management one needs to address the issue of running costs and replacing non-qualified managers in the clinics as needed. The MOPHP will need to set up targets for each facility linked with their budgets - currently MOPHP have targets per governorate and with no realistic costing or budgets to achieve targets.
 - Addressing gender: specific programs to improve women training and women's contribution in the middle and senior level management, to improve working conditions leading to better deployment of women cadres in rural areas.

- Involving men: programs to not only educate men about supporting women in their RH role but to focus on men's RH and use of RH services
- Developing NGO capacity: several NGOs active in the RH/FP field can be further supported / contracted with to deliver affordable quality services as an additional source of service to the public and private serving the poor.
- Involving private sector: interventions to improve the quality of private practice through better dissemination of knowledge and updating of skills as the bulk of private practitioners do not have access to information and training on the latest advances in FP/RH/MNCH. Also a program to improve the deployment of private doctors and midwives to rural and underserved areas, combining incentives with policy and with programs in collaboration with schools of medicine encouraging field practice and supervised tours of duty in the rural health clinics and hospitals

Family Planning

The failure of family planning programs in Yemen is among the most important ones both for its magnitude and also for the consequences it has on all other problems including on maternal mortality and infant mortality which are always cited as the most pressing problems in the Yemeni context. Unfortunately most interventions did not make Family planning a priority for several reasons including a poor understanding of the impact of family planning on safe motherhood.

Known Problems:

- Too many health facilities built by MOPHP or by local councils, local benefactors etc, without regard to whether they are really needed and without a plan and the resources to run them. Contractors and policy makers benefit most from building contracts and corruption is rampant.
- Ghost employees at MOPHP. Large roster of MOPHP employees drawing salaries and not working
- Most district level employees in health facilities are unqualified for the posts they hold, many get employment as a family or tribal right, many have multiple posts, posts can be obtained under fake names and sometimes even children get a post
- Budgets for running costs are insufficient and often end up in the pocket of the clinic manager especially if his family owned the land on which the facility was built.
- The MOPHP has no supervision system in place and no resources to have one set up and running, its standards and guidelines are not developed and/ or enforced and no monitoring is taking place to enforce compliance with standards or regulations.

- The drug supply system is riddled with corruption at every level, including at health facility level where the manager or the doctor usually has his own pharmacy right outside the premises or even on the premises.
- There are no incentives or disincentives in place to differentiate between performers and non-performers; the compensation is in itself inadequate and not a motivating factor
- There is no incentive for qualified workers to get assigned in remote areas where they are needed more.
- Working hours of clinics are not respected and whether a given health unit or center will be open on a given day is never sure.
- The quality of short term training is suspect: no needs assessments, no proper curriculum and training plans, bad selection of participants and various influences to bring in participants who have nothing to do with the training objectives. Participants are mostly drawn by the money they get as a meal and transport allowance; trainers basically give lectures to get a fee.
- There is no maintenance culture in health facilities; the equipment and furniture and sometimes even fixtures get carried away by local chiefs who run the facility or control those who run it. When equipment breaks down it stays that way. Sometimes new equipment stays uninstalled or stored for years until it is obsolete. The clinic personnel themselves have often no distinctive uniform, look dirty and unimpressive and do not inspire confidence in their qualifications or in the quality of their care.
- Water is an issue everywhere and most clinics lack the tools and personnel to keep the place clean– let alone germ free.
- Electrical power is sporadic and there is largely a reliance on power generators which need money to run and keep in working order.
- Managers of health clinics are often appointed by the local councils and selected among local tribal leaders' families without any requirement for training and qualifications. In many cases the manager post is inherited from father to son within the family that owned the land on which the clinic was built. In some cases, the budget of the facility is also considered the personal property of the manager. Managers are not trained as managers; there is no deliberate effort to train managers (pre-service) like there is for midwives or lab technicians.

Solutions do not get implemented because of a variety of factors:

- Weak MOPHP, with no visible commitment to seriously change the status quo, or vested interest in keeping things the way they are.

- Unclear or weak policies or even absence of policies
- Wide spread tolerance for providers not to offer or suggest FP for their clients; there is tolerance for provider bias and there is no focused effort to promote family planning. The MOPHP keeps a regular statistic on how many health facilities offer FP in proportion to the total; there does not seem to be a policy or desire that ALL facilities should offer some level of FP services
- Health providers often have no proper information or training on FP and are often the first source of misinformation and rumors.
- There are corrupt managers and decision makers at all levels
- Lack of power to enforce policies and decisions
- Total reliance on external donors to finance FP and no national commitment to put national resources for FP. Of course for starters the MOPHP itself is under-funded but it may also be said that whatever funds it gets are also mismanaged

What may work and what are possible interventions

1. At the health facility level:

The first set of interventions needed that one will often hear about includes building extensions to clinics to improve service capacity (such as for deliveries), renovate badly maintained facilities, provide new equipment and furniture, provide electricity and running water, provide drugs and supplies, adequate running costs, improve the clinic environment and road access etc., and provide trained staff to run the facility. These are all basic needs; nobody should question their validity and essential nature. No one, given a choice, would choose to go to a clinic in his or her country that lacks any of these conditions. The Yemeni public has the same needs for good services as anyone else and when the public services are bad, those who have the means seek private ones including outside of the country. Those who don't have that latitude will make other decisions, primarily to NOT use the services.

Unmet FP needs can be explained largely by this basic fact: women –and men- may tolerate sub-par facilities for emergency care and curative needs because they may have no other choice but when it comes to voluntary visits such as for family planning, why would they put up with bad and unpleasant services? They need to be attracted to the services when they are not forced to use them by necessity. If anyone tries to measure for example the unmet need for treating gun-shot wounds in Yemen it would be hard to find anybody who would not go to any available clinic no matter how dirty or ill equipped it is.

Clinics seldom get a complete makeover, there will always be something missing that prevents it from running properly and when it does not run properly, whatever was fixed will soon become broken again, equipment will disappear, staff will stay away, supplies will not

be replenished, etc. Half way solutions are very common in Yemen, programs and people seem to understand that it is NOT expected of them to do a complete and comprehensive job. It has become the “culture” to tolerate incomplete solutions and the prevailing culture condones this. An element of the complete solution we feel has often been neglected in health facilities improvement is the management. Therefore as soon as any clinic is fixed as needed, it is likely to fall back to its prior state quickly because there is no proper management or maintenance or quality control and improvement mechanism in place and there is no motivation among employees to make the clinic succeed and produce good results.

As a basic rule, to improve performance, one should reward performance, and to reduce non-performance one should make the employee assume the consequences of his/her lack of performance. One could give more autonomy to the main health facilities at district level and ensure each has a capable manager, strengthen his/her ability to set goals for service improvement, to plan and to monitor performance and results. Performance is rewarded systematically in private clinics and to some extent in those NGO clinics that run on cost recovery or financial sustainability rules. How can the public system adopt such rules? For a start each health facility should begin to run like a service business that needs to adapt to the market and win clients. For example, each health facility should have the most recent census data about the area it serves, should conduct community mapping in order to have good working estimates of the numbers of potential clients for various services, and to set targets for outreach services. Each health facility should make plans and targets for services and budget accordingly, should have the latitude to negotiate its budget with the local or governorate level council and to initiate schemes to raise funds to meet its needs. For example instituting fees for services is widely practiced in the MOPHP facilities despite instructions to the contrary (such as for free contraceptives) but there is no accountability or transparency and in all likelihood the money vanishes in private pockets. Health providers can be encouraged to keep the proceeds in a fully transparent and legal fashion if they prolong working hours into the afternoon and evening and pay a portion of the fees to improve the clinic. The MOPHP clinic could work as a private one and even better because it would have an advantage the private clinics do not have which is the budget from the central or local level. This budget basically protects the health providers from the risk of losing their capital which is a risk that private providers run all the time. Yet the budget should be aligned with the needs, capacities AND performance of the facility because the clinic should remain a public facility and there is government responsibility in ensuring that it is adequately supported.

The majority of fixed facilities in Yemen are NOT functional because of staffing and budget deficiencies. It is not reasonable to expect this to change in the near future. The more personnel Yemen trains and produces the more likely they will end up working in neighboring countries. While waiting to improve compensation for all qualified providers, the MOPHP should start by improving compensation for staff who work where they are

needed (in the remote districts) and not just where they prefer to work (large cities). To remedy the current lack of qualified staff and their inability to remain in the remote districts MOPHP could assign to each main district health facility (called a rural hospital) a mobile team (physician and a midwife) who makes regular once a week visits to the satellite health units around the facility in order to not only provide RH/FP services but also support and supervise health units which are usually poorly staffed and ensure that they still provide regular basic PHC services (immunizations, check-ups referrals) and contraceptives (re-supply). This team will have longer hours than regular staff and will travel every day to a different site on a rotating basis, they should be adequately compensated for this extra effort. In the last four years, USAID has a very successful experience in this area.

Badly funded centers that the MOPHP cannot afford to run should be closed down. MOPHP should review its list of health facilities and remove all health units or higher which it cannot adequately support or supervise. MOPHP is better off with closing all clinics that have serious staff shortages, poor budget or no equipment. Many of these are clinics that actually were not planned on need but on local pressures and many are quite close to other facilities that can do a better job serving the people. A few well run facilities are better than a multitude of mediocre ones. MOPHP can return these “unloaded” facilities to local authorities if they want to have them run as local private entities – a local nurse or midwife if available can make this a site for their privately run clinic with some consideration for the community in return or have them used as community centers for meetings, youth meeting places etc.. They can also be used for other social community needs (like youth centers or community education places). It is possible for the MOPHP to streamline its facilities and institute a new standard related to a select few clinics: One health Center (the main one) at the seat of every district will be considered as the “model” clinic for the district with a target of having it provide the full cafeteria of FP methods on an extended hours basis with all the bells and whistles- including proper counseling and education, outreach to satellite units (mobile teams) and follow up of clients – since we have client records and there are many midwives and morshidat around who are able to do home visits. From an overall health care point of view and not just FP/RH, this is in fact a health facility which should be open 24/7 and include emergency services, including the all-important night service for everything including deliveries. It may be a myth but somehow most deliveries and emergencies seem to occur when facilities are closed and access is blamed for the low use of health facilities for attended births. On a national level this is a target of 501 facilities in 21 governorates, these consist of 333 MCH centers, 124 rural hospitals and 44 governorate hospitals. There may be more than 1 large facility in some large population districts but the basic rule is at least one per district with only minor exceptions. Most family planning acceptors already come from these facilities and NOT from the few thousands of health units on the MOPHP lists (insert a stat to verify this). If this is adopted as a priority and full attention devoted to make these facilities function at the desired level of quality it will lead to a significant improvement in availability of FP services, meet a large part of the unmet needs (which are higher in larger

agglomerations served by these centers) and increase FP use (a percentage of 50% increase is not beyond reason given the current low level of use).

MOPHP should recall those health facility managers who have no qualifications, train the ones that are worth training and remove the rest as they represent the major barrier to change. It needs to enforce a policy of assigning health posts to qualified graduates of recognized institutions. If the national health institutes do not train managers they should start doing it; it should be just as much of a priority as training midwives or nurses.

Individual client records should be the basis for MIS and their use by health providers will improve care. Computerized client records will improve retrieval and analysis. This may also lead to eliminating the multitude of registers held at facilities which tends to impose unnecessary burdens on the staff, are not reliably used and produce unreliable data.

MOPHP employees should be prohibited from running commercial activities that constitute a conflict of interest with their post as a health employee. MOPHP should protect the pharmacies of the health facilities and protect consumers against unethical health providers who abuse clients of the health facilities

Laws should be enforced to give the health facility protection and sanctity against violence and aggressive acts such as closing of facilities by local tribal leaders as leverage in their disputes. Restrict access to health facilities service areas by other than patients and keep visitors in the visitors' areas.

Clinics should have a secure and steady drug and contraceptive supply and distribution system so that essential drugs and contraceptives are always available at health facilities whether they are sold or given free of charge.

The rights of clients should be publicized so that they know what they should get and what they should pay for, if any, and actions that punish infractions and perpetrators of client abuse and corruption should also be publicized.

A strict code of dress and personal hygiene for health workers should be enforced in all facilities, standards of cleanliness and order should be scrupulously observed and sanctioned.

While the MOPHP feels it has the right to close any private facility that does not conform to its standards, it tolerates mediocrity all the way in its own facilities. Learning from the private or NGO sector can start by requiring similar or better standards of the MOPHP's own facilities. This includes having a clean and healthy environment for health facilities including disposal of garbage, clean surroundings and access roads.

2. At the Ministry's central level:

To focus on access to services in order to reduce fertility and population growth, it is necessary to fix and empower the institutions that are responsible for providing FP services within the public sector. Just focusing on the facilities and the districts is not enough; the inertia and inefficiency from the top central level will continue to bring down the rest of the

system. Health managers at the periphery have to feel that the central level is supporting and promoting and not taking away resources from them.

Review MOPHP role and capacity in light of the decentralization policy and clarify specific tasks to be undertaken by central level staff in terms of helping facilities achieve their plans and targets. Right now decentralization is equated with relieving the central level of the responsibility to support the governorates and districts. MOPHP officials seldom know what facilities look like or how they work or whether they are actually working. There are hardly any supervisory visits taking place.

Integrate the Ministry's programs and eliminate duplication and waste that originates from running many programs vertically. Put an end to empire building and vertical programs. Integrate the MIS system, eliminate the isolation of RH from the rest of PHC and simplify the multitude of unnecessary reports required from health facilities. The only exception is the drug supply system where experts feel it is not advisable to mix the contraceptive storage with the rest of the drugs.

Overhaul the human resources system to have proper recruitment and placement policies and mechanisms, to encourage rotation and working in non urban areas, good staff retention, female employment and gender equality, performance and results, policies to require continuing education to update skills and knowledge and finally proper compensation for personnel and schemes to reward extended working hours in clinics and outreach visits.

Overhaul the ministry of health to eliminate corruption and murkiness. Establish transparency, accountability and benchmarks for performance and results. Eliminate the profit taking from international grants, loans and contracts by senior officials by enforcing a no tolerance policy against corruption. Lobby donors to institute clear guidelines and fairness in allowing salary supplements to employees of the MOPHP, unless the government decides to institute adequate compensation systems that eliminate the need for extra allowances.

Overall considerations for assistance programs in Yemen

The quality and effectiveness of USAID health assistance was demonstrated at least in the last five years in Yemen through successful interventions in five of the most impoverished, underserved and unstable governorates of Yemen, although these geographical areas do not represent the most populated and demographically significant ones in Yemen. Given the current level of funding and the fragmentation of aid, most success stories in Yemen tend to have limited significance in the large context because of their limited scale. For decades, the country has known such small scale interventions, demonstrations and pilot programs and many were successful within their scope but in general very little remains after such programs close down and similar new programs are needed again and again, etc...

Whether it is health or other areas of social life, Yemen remains decades behind other similar countries and all of its major indicators on the human development index confirm it. The challenge is not whether we know what to do or how to do it; we have proven effective approaches that are evidence-based best practices but the gap between what we know and what we do is widening. A specialized development agency such as USAID is in itself a university of knowledge, full of solutions that are near scientific certainty to succeed if applied properly but almost every USAID mission is likely to suffer from the same problem: lack of resources to do what needs to be done.

There is a need to stop applying small solutions and means to large problems and engage in large scale application of the knowledge and science on hand to achieve results that bring real change into people's lives, a change that is expressed through visible improvements in the quality of life and future prospects for people in every village in Yemen.

The Yemen MDG Report 2003 has stated that, at the current pace and with the current resources, Yemen is unlikely to achieve the MDG goals by 2015 for two of the four goals (maternal mortality, malaria and other diseases), is only potentially able to reach the goal of reducing MR among children under five and found no sufficient data to make a guess regarding HIV/AIDS. The financial gaps have been identified and are substantial, yet since then (2003) there was no visible indication (at least to us in the field) that the international donors to Yemen –or the government- have or will put up the resources to change their own statement of despair and failure to one of will and determination to reach the goals they have set. Maternal mortality, infant mortality and fertility have been and remain at unacceptable high rates, certainly due to the impotence of the government first and foremost, but this is also happening despite many years of international assistance to overcome local deficiencies. It may be that such assistance has been inconsistent, fragmented and far too limited in scope and size, whether from the US or other donors. Continuing at the same pace will continue to provide some of the right type of medicine for the cure but at the inappropriate doses to actually produce a cure.

The success of USAID assistance was frequently acknowledged by Yemeni partners and by other international programs in Yemen. One of the key reasons is the management as USAID interventions are implemented by capable and competitively selected US NGOs working on location with Yemeni partners and backed up by solid support as needed from the home base. Other donors programs such as the Global Fund, Gavi, the World Bank, have placed larger contributions directly in the hands of the local government and found that their funds were either underused or misused due to a limited absorptive capacity of the Yemeni government institutions, to lack of technical expertise, lack of good management and to wide-spread corruption. USAID funded programs, implemented by cooperating agencies do not suffer from such flaws; most complaints are about being underfunded whether at the start or after cuts have been introduced in mid stream.

USAID programs can have a leadership role in Yemen within the international community of donors. There is an opportunity at this time to work more closely with other development

partners and leverage funds in support of scaling up programs that US assistance through US NGOs has initiated. At this juncture, development partners are still looking to implement the Paris Declaration and achieve harmonization and alignment. This gives partners a chance to work with each other in joint scaled up efforts and there are opportunities for technical exchanges and coordination of approaches so that evidence-based approaches that are successful in USAID programs can also be adopted and funded by others, equivalent to leveraging other donors funds. It is also an opportune time given the increasing public awareness and demands that will eventually force civil service officials, elected officials at all levels and civil society to do their job. US assistance has to position itself to lead in technical quality as well as scope and country-wide impact.

Until 2010, USAID health assistance through its Basic Health Services project (BHS) has been very successful in addressing access and utilization of health services in a comprehensive fashion and offered comprehensive and integrated solutions albeit in just a few governorates. The interventions were built from the start within a scaling up framework that allows us to increase our absorptive capacity as more funds become available and as our partners become more involved in planning and ownership of the interventions. USAID health assistance has targeted the whole governorate each time and not just 2 or 3 districts as other donors do. This approach and the experience gained in implementing interventions in large areas of the country, offer an opportunity to make a larger impact if the resources are commensurate with the targets. Examples are the improvement in clinics and providers availability, the deployment of mobile medical teams, the involvement of religious leaders, the mobilization of intersectoral community education groups, and the support to local midwives to run private midwifery clinics. These interventions made a difference respectively in increasing access to health care and widening the advocacy and awareness-raising resources available to foster changes in the public knowledge and behavior. Several of the interventions in various sectors are producing good or even exceptional results but often, if not always, on a scale that's still very small to make an impact on the country as a whole.

Success is very often a relative term and real success cannot be measured outside of a far reaching strategy and vision. We may be satisfied with a given project results, but we also need to realize that real progress has to be measured within a larger frame of reference, such as the quality of life and a decent future for the next generations. We often pay too much attention to monitoring and evaluating small projects and spending a disproportionate amount of time, funds and expertise in making sure that small interventions are producing "great" results. When all is well and visible results are truly remarkable, it gives everyone a sense of pride and accomplishment for a job well done. But was it really? In a country such as Yemen in particular where every single aspect of the country's life is problematic we cannot help it feel a sense of doom and gloom and that this country will eventually collapse although we may be doing our assigned jobs well, and producing planned results each in his or her sphere. Whether it is the failing agriculture or the non-existent industry, the education or the status of women, water resources or persistent poverty and disease, government and the rule of law etc., all vital sectors

give reason for serious concern about their present status and especially their future. To begin making real progress, government action and international assistance together have to be adequate enough to make an impact not only in an isolated given sector but also in other related sectors because gains in one sector can easily be nullified by lack of progress in the rest. Health interventions for example will not succeed in a vacuum; they can only be sustained if they happen alongside progress in sanitation, water quality, education, agriculture, social reform, creation of jobs and income, improving the environment, roads and communication infrastructure, etc.

The political significance of Yemen for the region is not too dissimilar to that of Afghanistan. The failure to provide development assistance in Afghanistan is the apparent reason to blame for the current status. Development assistance still remains the key to potentially reversing the current trend, if it is not too late. Yemen may well be the next Afghanistan.

Following the 2008 National Population Conference, there seemed to be a consensus that the country had failed to make progress in stabilizing its population growth and that it is a national priority now more than ever to take action to change that. It was also accepted that the most direct and essential route to take will be to make access to Family Planning (FP) services in Yemen widely available and to meet the unmet needs in this area.

The required focus on FP would not come at the expense of other crucially important RH concerns such as safe motherhood, or other primary or curative care concerns. Strengthening and focusing on family planning services is integrated with, and necessary for the overall goals of improving maternal, neonatal and child health and reproductive health.

Ensuring that family planning services are part and parcel of primary health care does not have to be an all or nothing proposition - some parts can be integrated first, other will follow later. Integration should be done where it is most feasible and effective at this time given the various constraints, including financial. Successful family planning outcomes can serve to reduce the burden on primary health care services as family planning saves lives and improves the health of the mother and the child. The MOPHP should be able to use information from the RAPID analysis to show what investments in development and social welfare (health, education, agriculture housing, etc...) will have to be made based on which family planning scenario is adopted (low growth versus moderate or unchecked growth).

It is urgent to improve the capacity of the Population Sector to become effective and enable it to work better in integration with the rest of the Ministry. This includes personnel, financial resources, equipment and vehicles. Strengthening the Population Sector is not contrary to integration but is a first and necessary step toward overall integration. Without strengthening of the elements that need to be integrated, the eventual integration will likely result in FP/RH losing their importance as a national priority. Areas of strengthening include creating capacity for planning and programming, forecasting, training, implementing, scaling up successful initiatives, monitoring and supervision. NPC, on the other hand, will need to work closely with the

Population sector's health education center on advocacy, client centered health education and community awareness.

Strengthening of the population sector may encompass providing additional international advisors for family planning programming and logistics and development partners are likely to provide such help. MOPHP should also assign a senior level national coordinator whose role will be to support family planning services development across the MOPHP departments and facilitate the collaboration and coordination between the deputy ministers in support of better integration of family planning. This coordinator is best placed at the Minister's office and will also work with each of the development partners within the RHTG.

Within the overall goal of making family planning available everywhere in the country, the MOPHP needs to identify priorities and break down the total goal into achievable sub goals. Instead of targeting all health facilities in the country the priority target should be 335 health centers at the rate of one (1) main MCH center per district, in addition to about 150 rural hospitals reported as operating and 67 governorate hospitals and major public hospitals. This is a little more than 500 facilities among the overall number of 3,200 that the MOPHP usually targets for PHC and health activities in general. These are the main facilities that actually represent the bulk of the country system so it is not a small target by any standards, but focusing on these in the first place will be more manageable and a more efficient allocation of resources. In a second stage, MCH centers and hospitals will be empowered to play a role (as referral centers) to improve the satellite health units that report and refer to them. Other modes of delivery such as mobile teams and outreach midwives will also have a role to bring services to areas beyond the normal reach of the main district facility. Social marketing agents and community based distribution especially by community midwives, focusing on oral contraceptives and condoms would also be trained and supported to provide referrals when long acting methods are indicated. Each development partner (DP) will assess with their MOPHP governorate directors how many of their main facilities are working properly and how many remain to be assisted in each governorate. Each DP can set a target to cover all main centers at the rate of one per district in their respective governorates. The standards across all districts should be harmonized; the current effort of the MOPHP to review all existing guidelines is a step in this direction.

While continuing to support all methods of FP, the MOPHP should make it clear to health providers and health managers that the MOPHP supports the dissemination of a wide selection of contraceptive methods but also places the emphasis on long acting ones as the most effective methods - namely the IUD and implants - as methods that need more attention by providers to become more widely used. Yemen users adopt natural and traditional methods by a ratio of four to one. It is fine to include natural and traditional methods in the overall menu but no country has ever made a demographic transition without a strong emphasis on modern methods, especially the long acting methods. The MOPHP needs to strongly support this new strategic emphasis with proper training and mobilization of health providers to include experienced midwives who can provide these methods as well as doctors.

The MOPHP and the NPC should work more effectively together to translate national population goals into program and service targets at the governorate, district and facility levels. Service statistics must be analyzed regularly and compared to program objectives, progress in achieving higher prevalence rates need to be charted, and underachieving facilities have to account for their performances and be brought up to par with the rest. This is to be done within the parameters of voluntary family planning and informed choice by clients. There are no shortcuts and the MOPHP should use the modern arsenal of social marketing techniques and behavior change communication (BCC) to bring change in people's knowledge and behavior. But no change is going to take place without health providers and their services changing first and restoring (or establishing) the public's confidence in their products and services.

The MOPHP should issue clear and forceful directives on promoting family planning to all health directors, issue updated guidelines and service standards and provide adequate training to all providers. The above should include establishing quality control mechanisms in every facility to ensure that health care standards, such as proper infection control and other clinical procedures and protocols are strictly observed. In addition there should be instructions from the Ministry about the following:

- Instruction to clinic staff to give counseling and offer contraception services to all mothers who come for child health clinics, general immunization or for postpartum care; they can also involve husbands when present. Birth spacing counseling should also be part of all antenatal care services.
- Instruction to providers to refrain from injecting their personal biases into the service they provide; if they personally are against FP or have misconceptions about it, they should not deprive clients from it as a right. Training in FP should include addressing providers' biases including religious beliefs and ethical and gender considerations (gender awareness, men serving women, serving young couples or individuals, ethics of requiring husband approvals, etc.)
- Instructions to display Service Guidelines so they are clearly visible in all clinics (including gratuity of services), to distribute adequate client information about each method and its effectiveness, and to adequately address client concerns and common myths about methods.
- The MOPHP should provide more direction to its representatives in the governorates and have them become more involved in setting service goals and committing to implement them. Achieving family planning objectives requires governorate health offices to feel responsible and be motivated. Some health offices seemingly are no longer interested in distributing more contraceptives because they no longer have the monetary incentive after FP services became free of charge. This situation has to be addressed firmly by the leadership including finding ways to reward good performance.

Focusing on support to FP does not mean a call for a vertical program to be established but rather for the MOPHP leadership to identify and increase resources that are specific to FP and ensure that these resources are managed in conjunction with the rest of the MOPHP programs. Reproductive health goals, such as raising the level of antenatal care use, increasing birth preparedness and the proportion of skilled attendance at births, making EmOC more available and providing wide access to best practices in postpartum care, all go hand in hand with making family planning choices more available and widely used, as do goals for healthier, well-immunized, better nourished and better educated children. Integration opportunities are numerous including service facilities and staff. Investments in family planning will be much more effective and less costly if they are integrated with investments in overall PHC services than if programs are isolated and vice versa.

Annex 1. List of Documents used in the preparation of this report

Project Documents, Reports and databases on the following

Work Plans (2006- 2010)

Quarterly Reports (2006-2010)

Quarterly reports on Best Practices project (2009-2010)

Annual Reports (2006-2010)

PMP documents (2006-2010)

MOPHP and Governorate annual plans for Reproductive Health (2008-2009)

Best Practices Project reports and database

Equipment Distributed and final inventory of assets

Midwives in Private Practice Project database

Religious Leaders activities database

Mobile Teams services database

Training activities database and reports

Media Coverage and Press Releases

Service statistics and other MOPHP reports

Other Documents

- The National Reproductive Health Strategy 2006-2010, Republic of Yemen, Ministry of Public Health and Population, Population Sector, October 2006
- Yemen Family Health Survey, Pan-Arab Project for Family Health, 2003
- Yemen: Monitoring the Situation of Children and Women, Multiple Indicator Cluster Survey, 2006, Ministry of Health and Population, Pan-Arab Project for Family Health, UNICEF.